peptides was obtained by deletion of amino acids residues from C-terminal, N-terminal, or both sides. Neurolysin and TOP hydrolyzed the substrates at P[bond]Y or Y[bond]I or R[bond]R bonds depending on the sequence and size of the peptides, while NEP cleaved P-Y or Y-I bonds according to its S'1 specificity. One of these substrates, Abz-NKPRRPQ-EDDnp was a specific and sensitive substrate for neurolysin (kcat = 7.0 s-1, Km = 1.19 μM and kcat/Km = 5882 mM-1 · s-1), while it was completely resistant to NEP and poorly hydrolyzed by TOP and also by prolyl oligopeptidase (EC 3.4.21.26). Neurolysin concns. as low as 1 pM were detected using this substrate under our conditions and its analog Abz-NKPRAPQ-EDDnp was hydrolyzed by neurolysin with kcat = 14.03 s-1, Km = 0.82 μM, and kcat/Km = 17,110 mM-1 · s-1, being the best substrate so far described for this peptidase. (c) 2001 Academic Press.

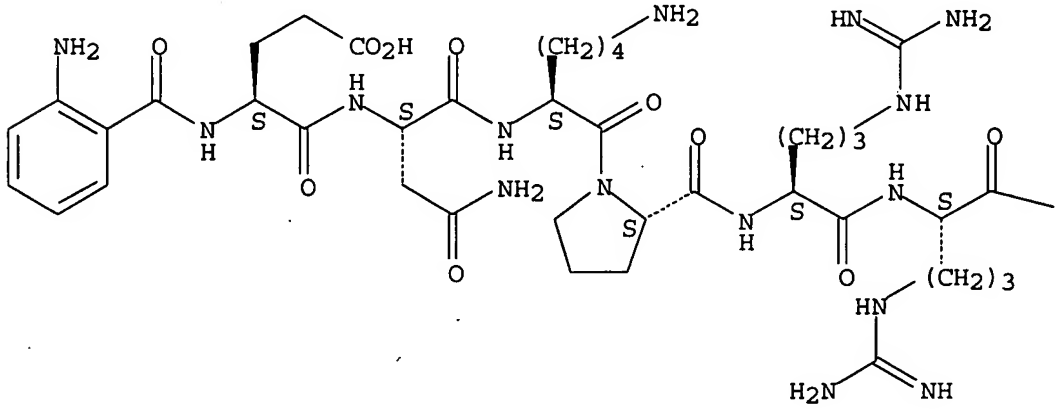
IT **353523-75-8 353523-76-9 353523-77-0**
353523-78-1 353523-79-2 353523-80-5
353523-81-6 353523-82-7 353523-83-8
353523-84-9 353523-85-0 353523-86-1
RL: ARU (Analytical role, unclassified); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(selective neurotensin-derived internally quenched fluorogenic substrates for neurolysin (EC 3.4.24.16) and comparison with thimet oligopeptidase (EC 3.4.24.15) and neprilysin (EC 3.4.24.11))

RN 353523-75-8 CAPLUS

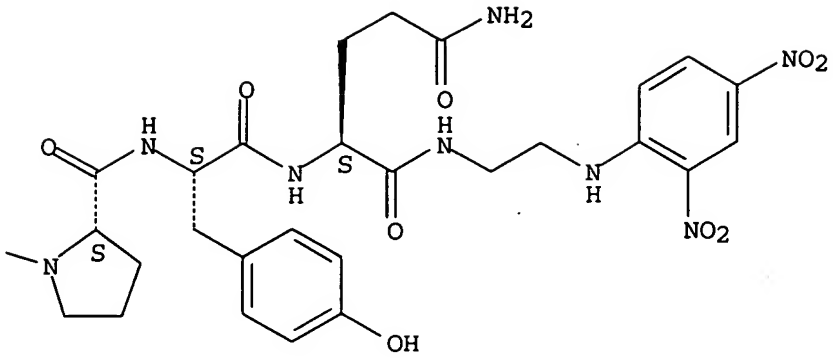
CN L-Glutamamide, N-(2-aminobenzoyl)-L-α-glutamyl-L-asparaginyl-L-lysyl-L-prolyl-L-arginyl-L-arginyl-L-prolyl-L-tyrosyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



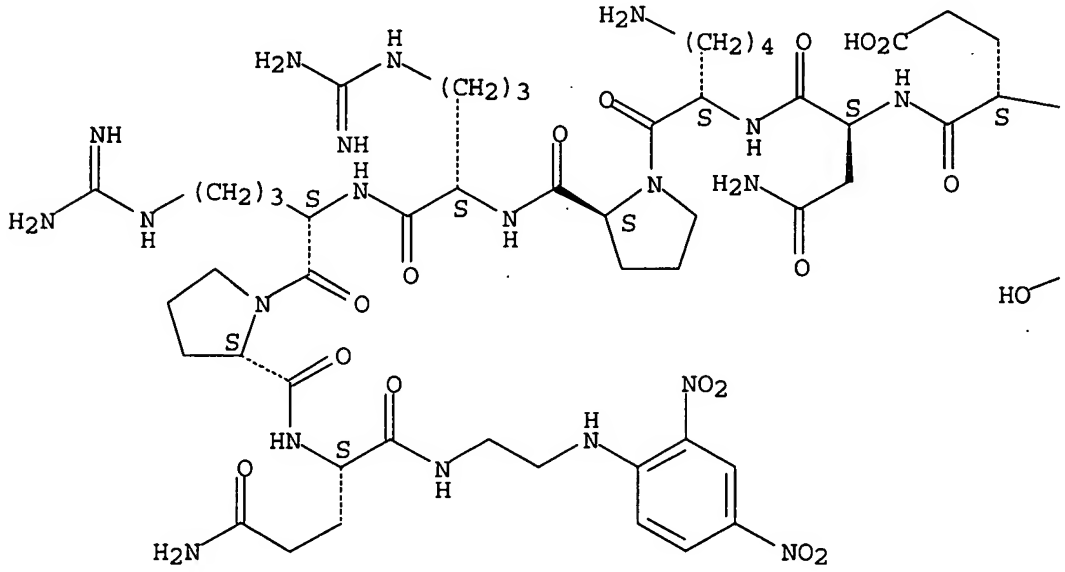
PAGE 1-B



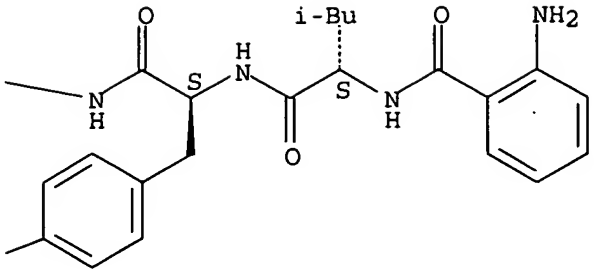
RN 353523-76-9 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-leucyl-L-tyrosyl-L-α-glutamyl-L-asparaginyl-L-lysyl-L-prolyl-L-arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



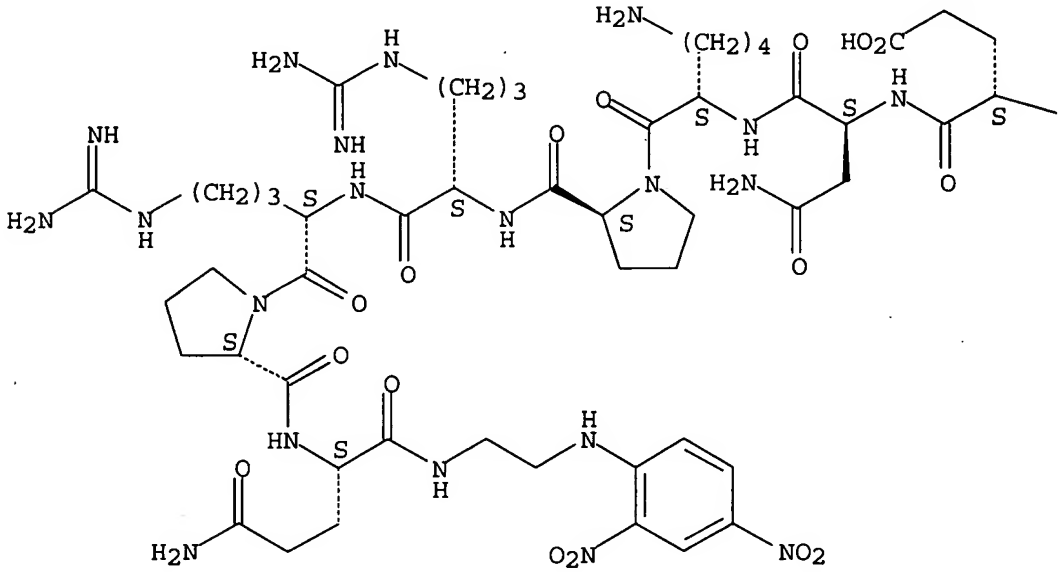
PAGE 1-B



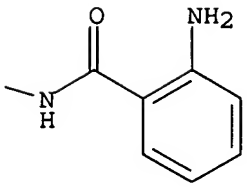
RN 353523-77-0 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-α-glutamyl-L-asparaginyl-L-lysyl-L-prolyl-L-arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

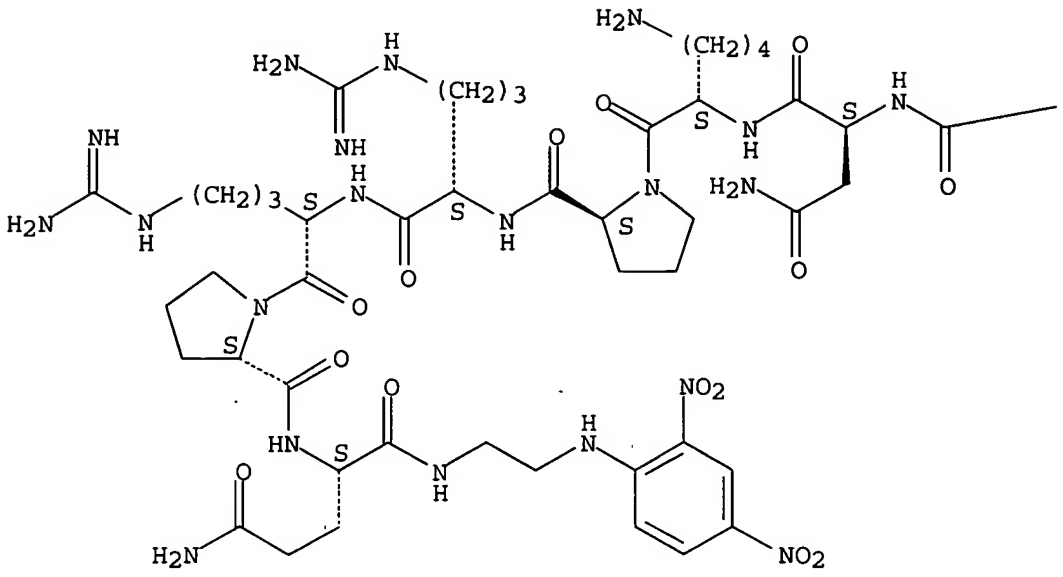


RN 353523-78-1 CAPLUS
CN L-Glutamamide, N2-(2-aminobenzoyl)-L-asparaginyl-L-lysyl-L-prolyl-L-

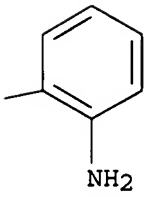
arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

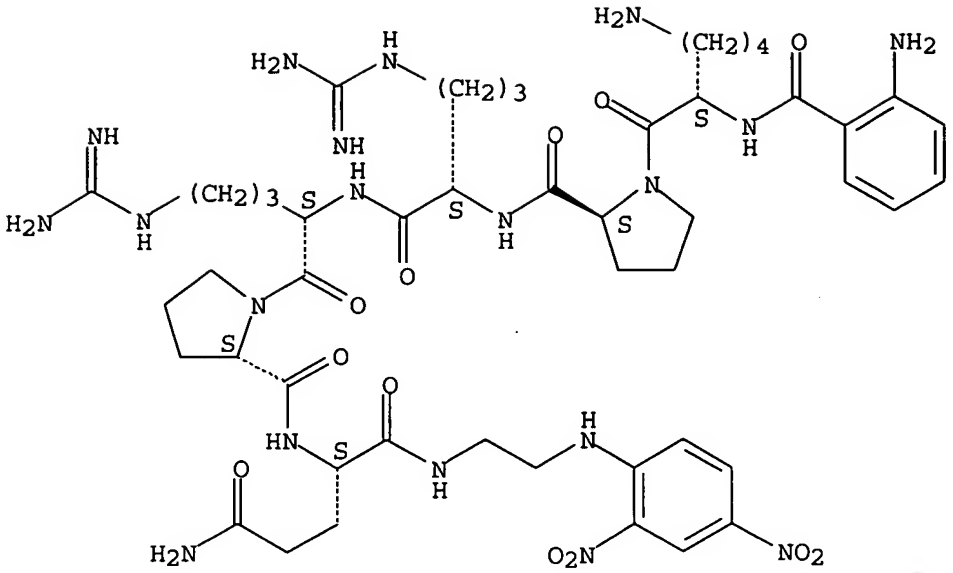


PAGE 1-B



RN 353523-79-2 CAPLUS
CN L-Glutamamide, N2-(2-aminobenzoyl)-L-lysyl-L-prolyl-L-arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

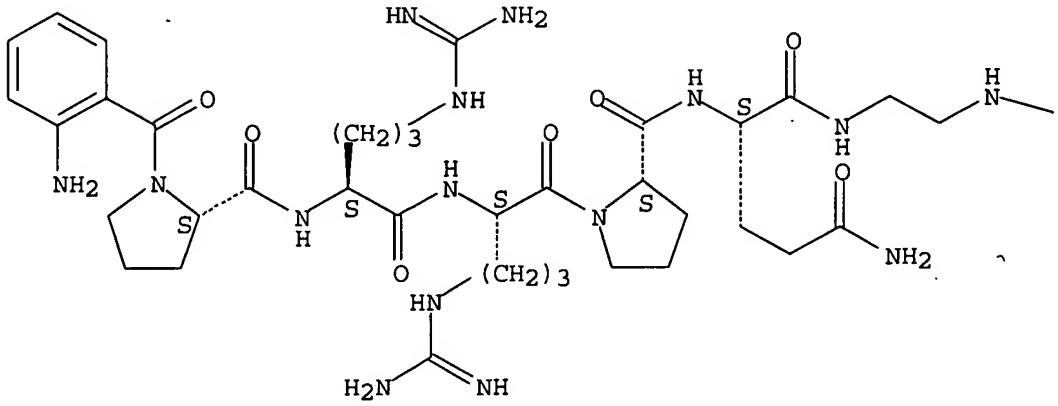
Absolute stereochemistry.



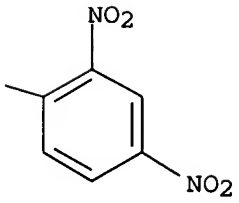
RN 353523-80-5 CAPLUS
CN L-Glutamamide, 1-(2-aminobenzoyl)-L-prolyl-L-arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



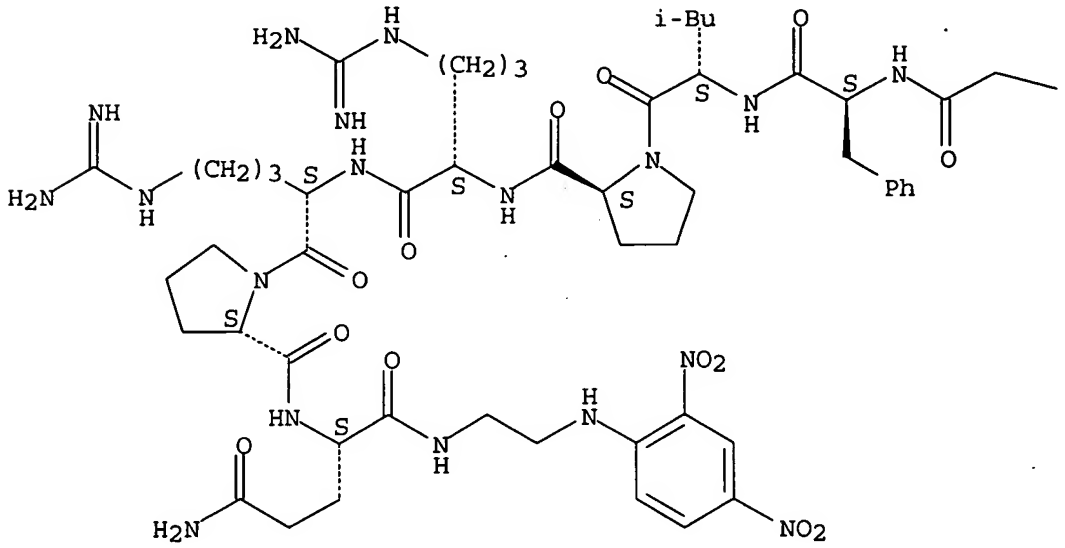
PAGE 1-B



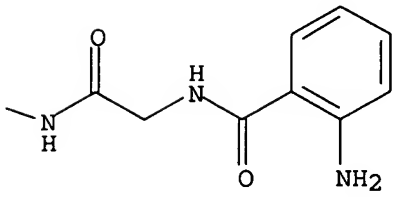
RN 353523-81-6 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)glycylglycyl-L-phenylalanyl-L-leucyl-L-prolyl-L-arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



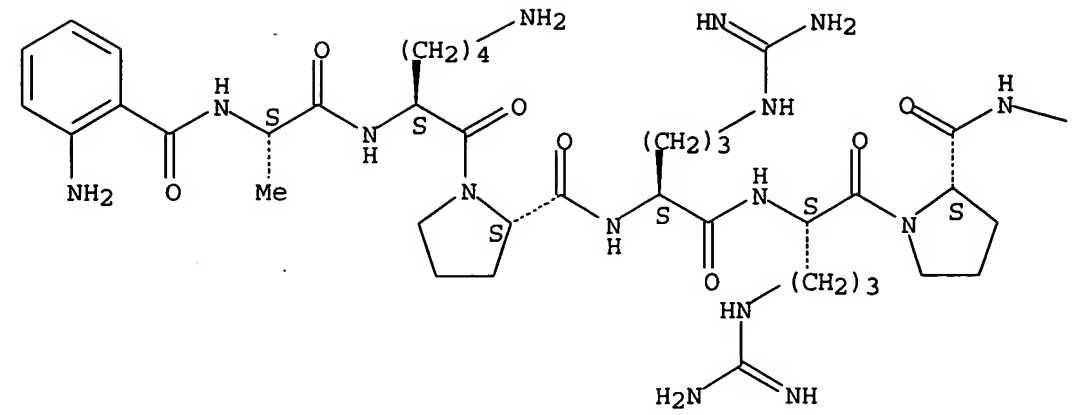
PAGE 1-B



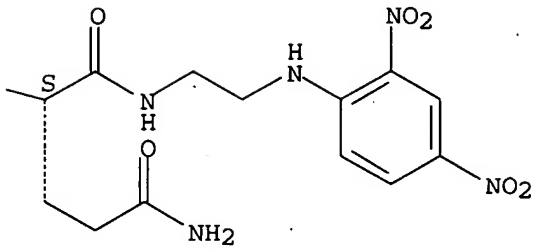
RN 353523-82-7 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-alanyl-L-lysyl-L-prolyl-L-arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



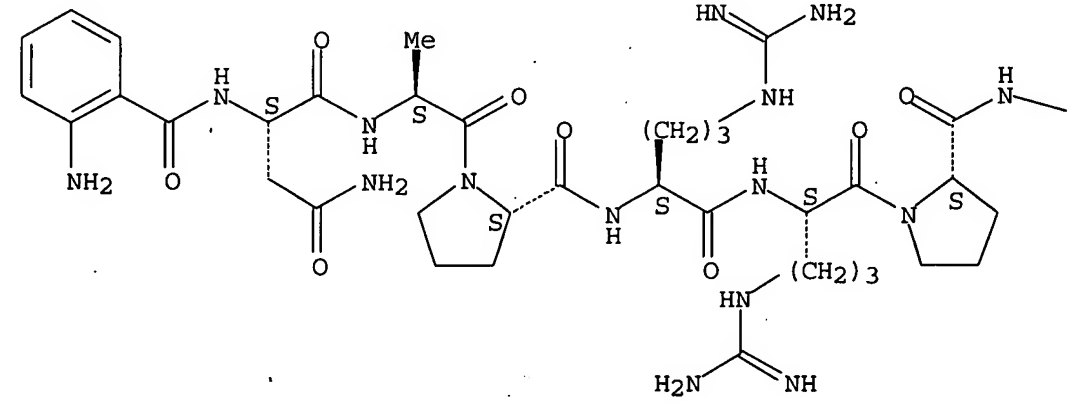
PAGE 1-B



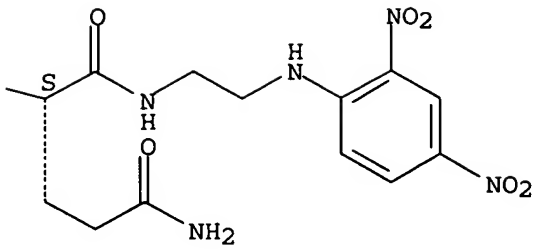
RN 353523-83-8 CAPLUS
CN L-Glutamamide, N2-(2-aminobenzoyl)-L-asparaginyl-L-alanyl-L-prolyl-L-arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



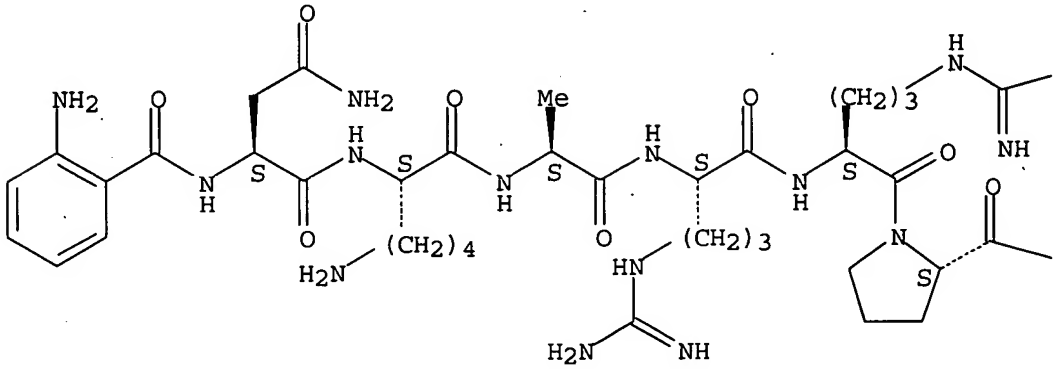
PAGE 1-B



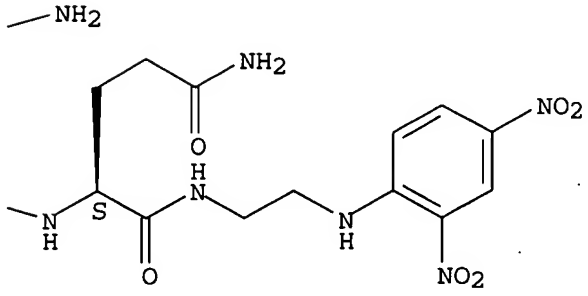
RN 353523-84-9 CAPLUS
CN L-Glutamamide, N2-(2-aminobenzoyl)-L-asparaginyl-L-lysyl-L-alanyl-L-arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

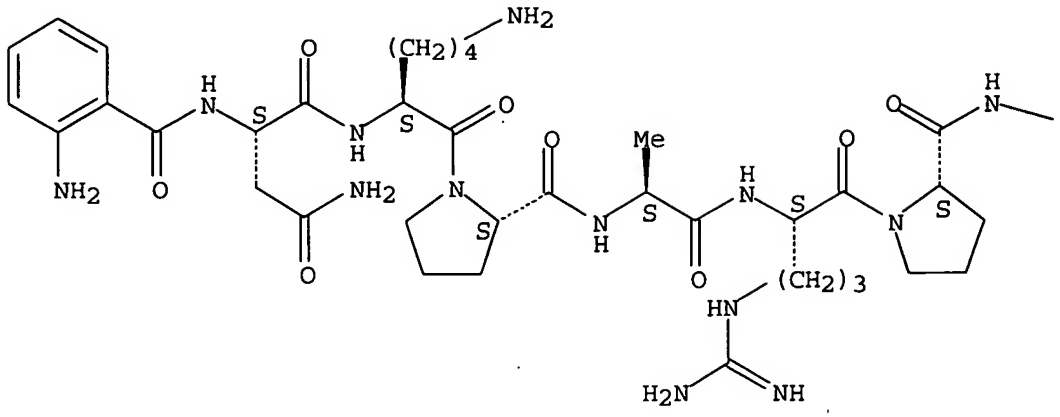


RN 353523-85-0 CAPLUS
CN L-Glutamamide, N2-(2-aminobenzoyl)-L-asparaginyl-L-lysyl-L-prolyl-L-alanyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA

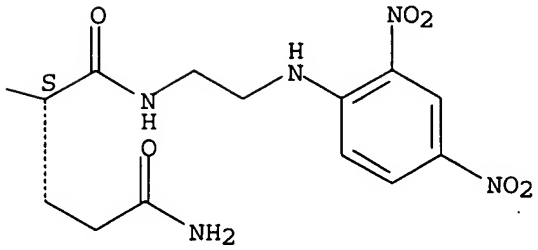
INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

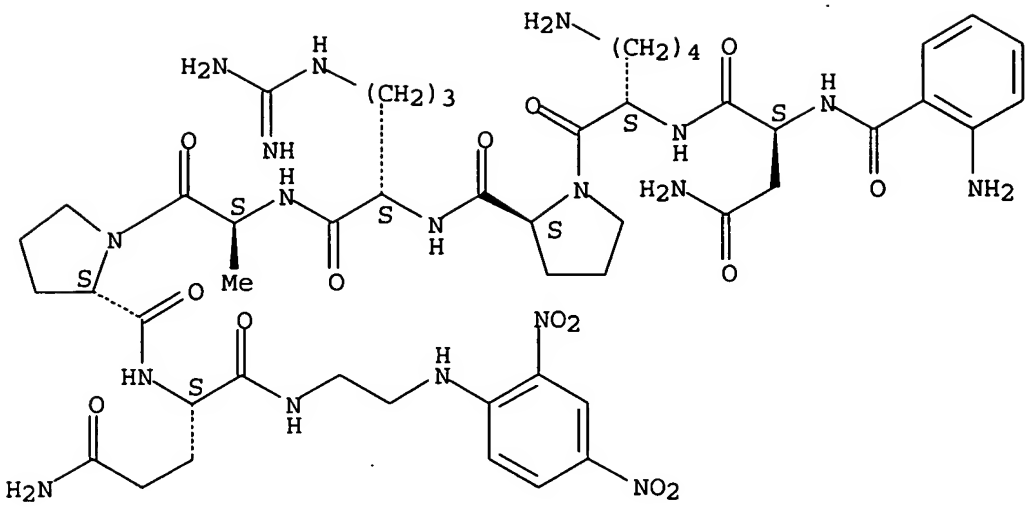


PAGE 1-B



RN 353523-86-1 CAPLUS
CN L-Glutamamide, N2-(2-aminobenzoyl)-L-asparaginyl-L-lysyl-L-prolyl-L-arginyl-L-alanyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:129915 CAPLUS
DN 134:174845
TI Method for detecting enzyme-catalyzed cyclization and identifying peptidase inhibitors
IN Bartlett, Paul A.; Burger, Matthew T.
PA The Regents of the University of California, USA
SO U.S., 14 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

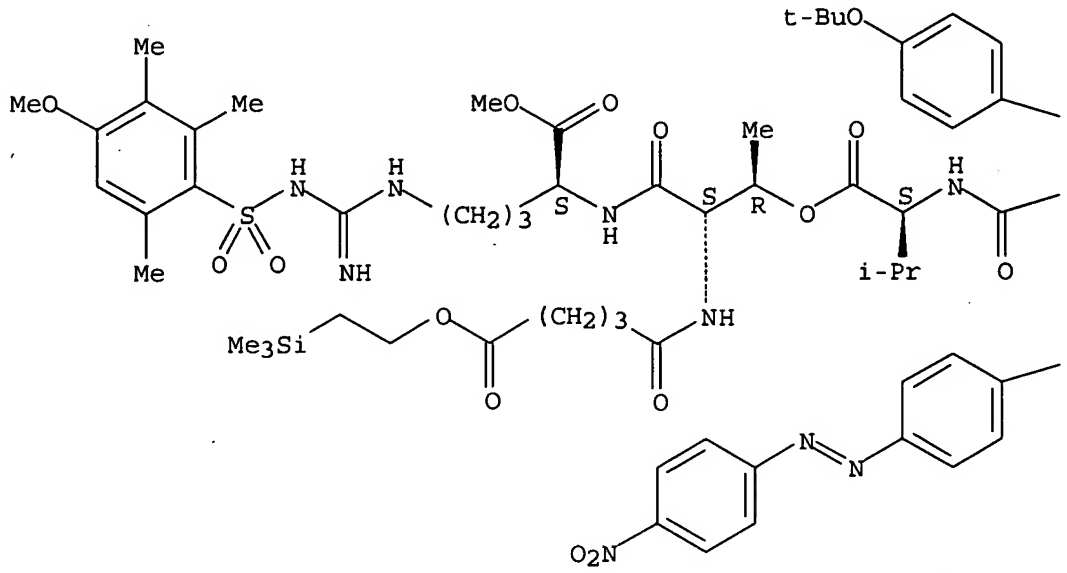
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6190920	B1	20010220	US 1997-967910	19971112
			US 1997-967910	19971112

OS MARPAT 134:174845
AB A method for detecting cyclization of acyclic compds. is disclosed. The method comprises (a) contacting a peptidase-containing sample with NH2-R1-X-R2-CO-Y (CO-Y = carboxylic acid, ester, or amide which can be acylated or hydrolyzed by the peptidase; R1,R2 = ≥1 amino acid residues; one of R1 amino acids is linked to a dye or a resin and one of R2 amino acids is linked to a resin or dye such that a dye is attached at one side of X and a resin in attached to the other side of X; X = a group cleavable under conditions which do no cleave peptide bonds, e.g., ester, disulfide bond, cis diol, carbonate); (b) contacting the product of step (a) with an X-cleaving agent; (c) isolating the resin; and (d) determining the presence or absence of the dye mol. on the isolated resin. Thus, cyclization of the acyclic compound and presence of the peptidase is indicated by retention of the dye mol. on the resin. The invention also relates to using the above assay in screening for macrocyclic peptidase inhibitors. This method is useful for screening a combinatorial library of compds.
IT **326811-13-6P 326811-27-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(method for detecting enzyme-catalyzed cyclization and identifying peptidase inhibitors)

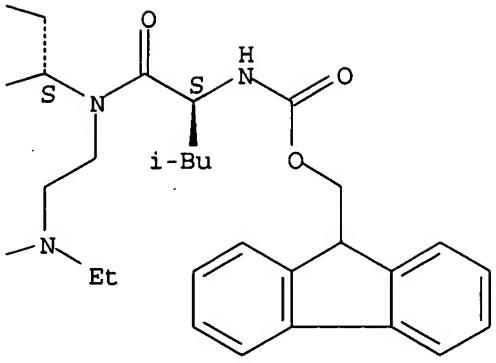
RN 326811-13-6 CAPLUS
CN L-Ornithine, N-[1,5-dioxo-5-[2-(trimethylsilyl)ethoxy]pentyl]-O-[N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-leucyl-O-(1,1-dimethylethyl)-N-[2-[ethyl[4-[(4-nitrophenyl)azo]phenyl]amino]ethyl]-L-tyrosyl-L-valyl]-L-threonyl-N5-[imino[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]methyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B

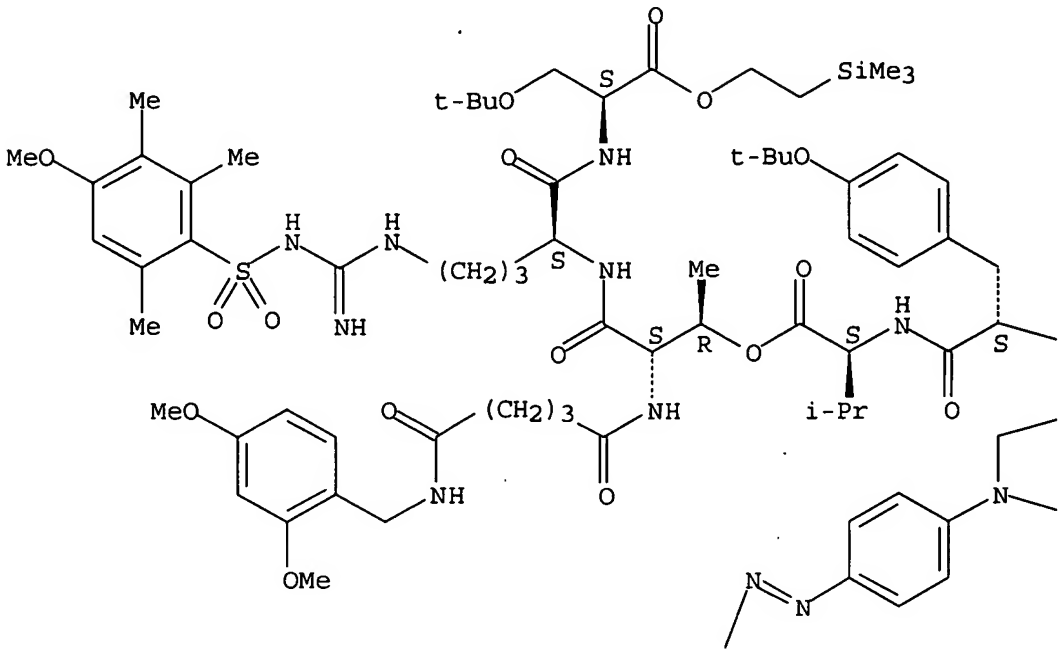


RN 326811-27-2 CAPLUS
CN L-Serine, N-[5-[[(2,4-dimethoxyphenyl)methyl]amino]-1,5-dioxopentyl]-O-[N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-leucyl-O-(1,1-dimethylethyl)-N-[2-[ethyl[4-[(4-nitrophenyl)azo]phenyl]amino]ethyl]-L-tyrosyl-L-valyl]-L-

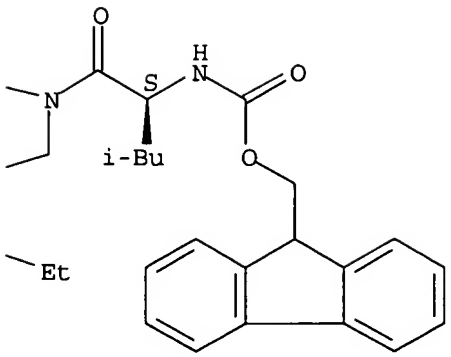
threonyl-N5-[imino[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]methyl]-L-ornithyl-O-(1,1-dimethylethyl)-, 2-(trimethylsilyl)ethyl ester (9CI) (CA INDEX NAME)

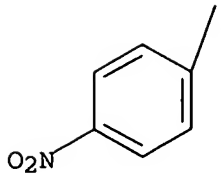
Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B





RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

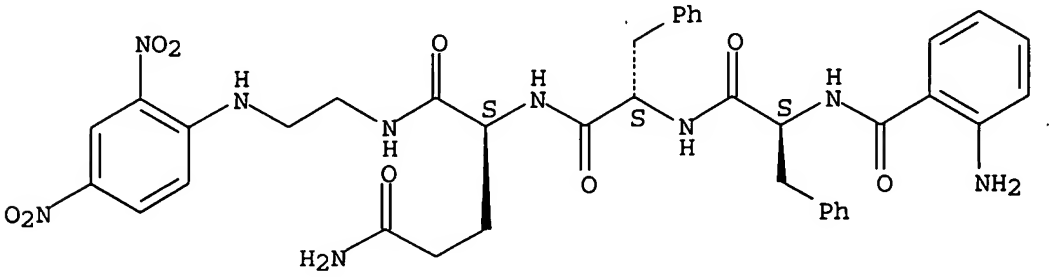
L4 ANSWER 30 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:76987 CAPLUS
DN 134:233518
TI Characterization of a prolyl endopeptidase (kininase) from human urine using fluorogenic quenched substrates
AU Quinto, B. M. R.; Juliano, M. A.; Hirata, I.; Carmona, A. K.; Juliano, L.; Casarini, D. E.
CS Universidade Federal de Sao Paulo, Escola Paulista de Medicina, Departmento de Medicina, Disciplina de Nefrologia, Sao Paulo, CEP 04023-900, Brazil
SO International Journal of Biochemistry & Cell Biology (2000), 32(11-12), 1161-1172
CODEN: IJBBFU; ISSN: 1357-2725
PB Elsevier Science Ltd.
DT Journal
LA English
AB A prolyl endopeptidase (PE) was purified 83 times from human urine by DEAE-cellulose and Sepharose Mercurial chromatogs. In this work we studied the specificity of PE using different fluorogenics substrates. Further characterization of the enzyme was carried out using BK and its analog, Abz-RPPGFSPFRQ-EDDnp and Abz-FPQ-EDDnp, for measure of enzymic activity of prolyl endopeptidase (Abz = ortho-aminobenzoic acid; Eddnp = N-[2,4-dinitrophenyl]ethylenediamine). The substrate Abz-FPQ-EDDnp was considered as specific for PE. The endopeptidase PE, with a mol. weight of 45 kDa, was inhibited 100% by EDTA and pOHMD and resistant to PMSF, thyorphan, E64 and phosphoramidon, when we used the mentioned substrates. These results suggest that PE is a metallo endopeptidase that contains a thiol group important for its activity. It was also able to hydrolyze in Abz-RPPGFSPFRQ-EDDnp the F-R peptide bound, differing from those obtained upon BK mol., where the enzyme prefer the peptide bound located after double proline. In the substrate Abz-FRQ-EDDnp PE hydrolyzes the P-Q peptide bound. Furthermore the urinary PE is particularly unable to hydrolyze peptides with single prolines such as substance P, neurotensin and LHRH. The determined Km for Abz-RPPGFSPFRQ-EDDnp and Abz-FRQ-EDDnp were 0.74 and 0.65 uM, resp. The optimum pH for the PE activity, using the substrate Abz-RPPGFSPFRQ-EDDnp was .apprx.9.0, but using the specific substrate Abz-FPQ-EDDnp was 6.5 and 8.0. Endopeptidases, which are situated at brush border surface from proximal tubules, have an important role in kidney handling of many peptides, which are filtered by the glomerulus. The prolyl endopeptidase located at distal tubule could have an important physiol. function in control of kinin formed in this portion. It's known that all components from kallikrein-kinin system like low mol. weight kininogen and kallikrein are present in this portion.
IT **256531-61-0 330188-28-8 330188-30-2**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(characterization of prolyl endopeptidase (kininase) from human urine using fluorogenic quenched substrates)

RN 256531-61-0 CAPLUS

CN L-Glutamamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

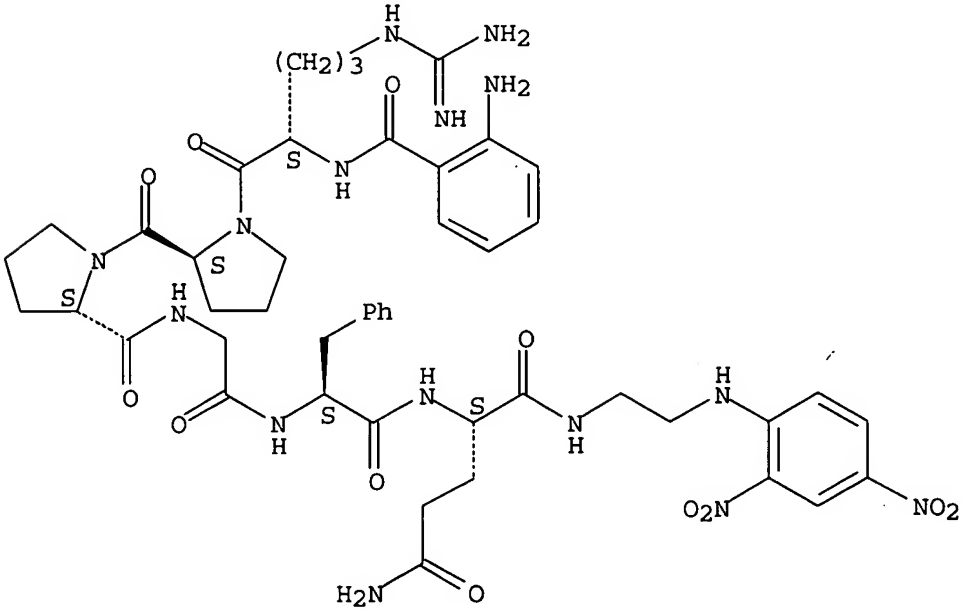
Absolute stereochemistry.



RN 330188-28-8 CAPLUS

CN L-Glutamamide, N2-(2-aminobenzoyl)-L-arginyl-L-prolyl-L-prolylglycyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

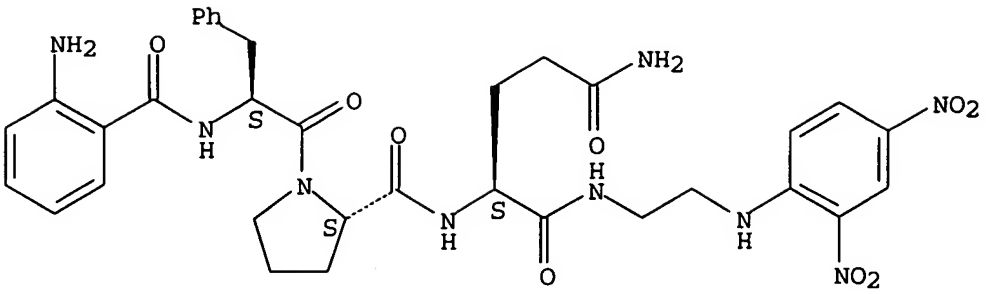
Absolute stereochemistry.



RN 330188-30-2 CAPLUS

CN L-Glutamamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

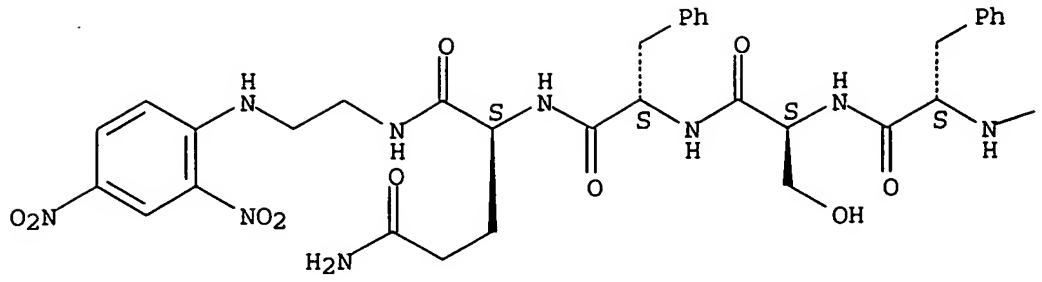


RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

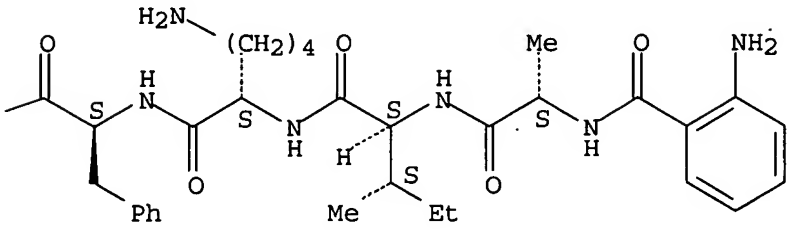
L4 ANSWER 31 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:44250 CAPLUS
DN 134:322500
TI Substrate specificity of human cathepsin D using internally quenched fluorescent peptides derived from reactive site loop of kallistatin
AU Pimenta, D. C.; Oliveira, A.; Juliano, M. A.; Juliano, L.
CS Department of Biophysics, Escola Paulista de Medicina - UNIFESP, Sao Paulo, 04044-020, Brazil
SO Biochimica et Biophysica Acta (2001), 1544(1-2), 113-122
CODEN: BBACAQ; ISSN: 0006-3002
PB Elsevier Science B.V.
DT Journal
LA English
AB It was shown that kallistatin, a serpin that specifically inhibits human tissue kallikrein, was cleaved at the Phe-Phe bond in its reactive site loop (RSL) by cathepsin D. Internally quenched fluorescent peptides containing the amino acid sequence of kallistatin RSL were highly susceptible to hydrolysis by cathepsin D. Surprisingly, these peptides were efficiently hydrolyzed at the Phe-Phe bond, despite having Lys and Ser at P2 and P2' positions, resp., which has been reported to be very unfavorable for substrates for cathepsin D. Due to the importance of cathepsin D in several physiol. and pathol. processes, we took the peptide containing kallistatin RSL sequence, Abz-Ala-Ile-Lys-Phe-Phe-Ser-Arg-Gln-EDDnp (EDDnp = N-[2,4-dinitrophenyl]-ethylenediamine and Abz = ortho-aminobenzoic acid), as a reference substrate for a systematic specificity study of S3 to S3' protease subsites. We present in this paper some internally quenched fluorescent peptides that were efficient substrates for cathepsin D. They essentially differ from other previously described substrates by their higher kcat/Km values, due mainly to low Km values, such as the substrate Abz-Ala-Ile-Ala-Phe-Phe-Ser-Arg-Gln-EDDnp (K m= 0.27 μM, kcat = 16.25 s-1, kcat/Km = 60185 μM-1s-1).
IT **335651-01-9 335651-07-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(internally quenched fluorescent peptides derived from reactive site loop of kallistatin permit anal. of human cathepsin D substrate specificity)
RN 335651-01-9 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-alanyl-L-isoleucyl-L-lysyl-L-phenylalanyl-L-phenylalanyl-L-seryl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



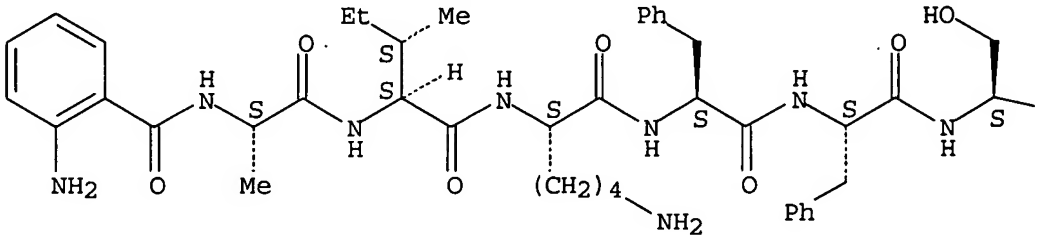
PAGE 1-B



RN 335651-07-5 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-alanyl-L-isoleucyl-L-lysyl-L-phenylalanyl-L-phenylalanyl-L-seryl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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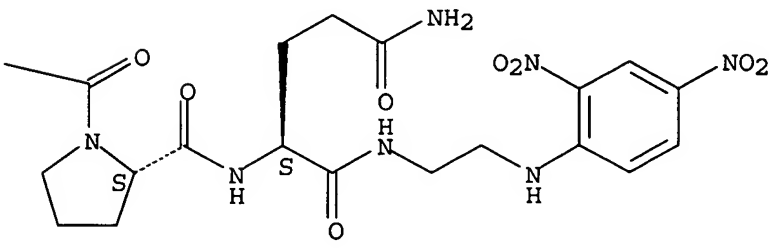
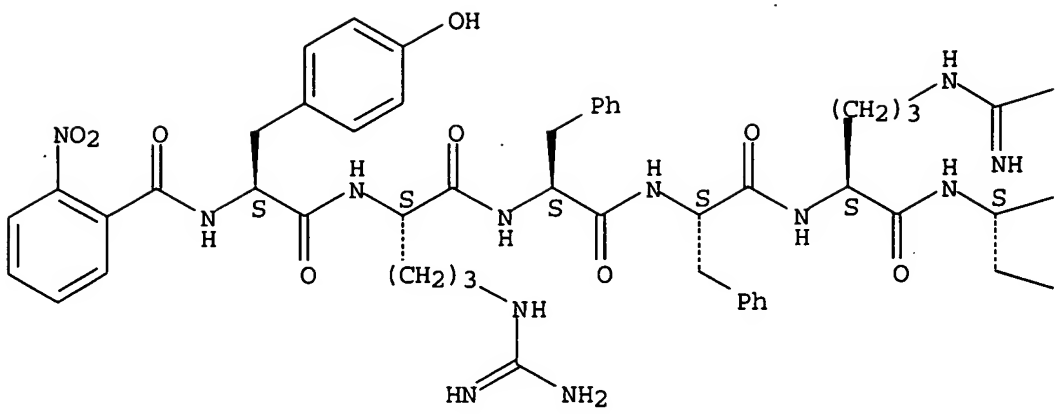


RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

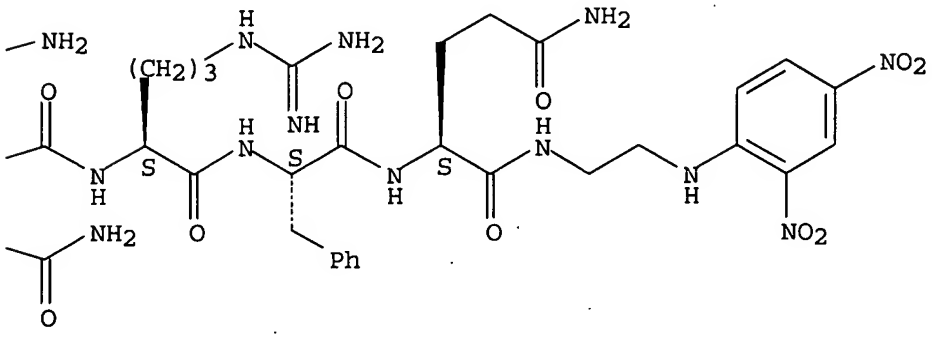
L4 ANSWER 32 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:641664 CAPLUS
DN 133:346387
TI The substrate specificity of a recombinant cysteine protease from Leishmania mexicana: application of a combinatorial peptide library approach
AU St. Hilaire, Phaedria M.; Alves, Lira C.; Sanderson, Sanya J.; Mottram, Jeremy C.; Juliano, Maria A.; Juliano, Luiz; Coombs, Graham H.; Meldal, Morten
CS Department of Chemistry, Carlsberg Laboratory, Valby, 2500, Den.
SO ChemBioChem (2000), 1(2), 115-122 Published in: Angew. Chem., Int. Ed., 39(16)
CODEN: CBCHFX; ISSN: 1439-4227
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
AB The substrate specificity of CPB2.8ΔCTE, a recombinant cysteine protease from Leishmania mexicana, was mapped by screening a fluorescence-quenched combinatorial peptide library. Results from library screening indicated a preference for Arg or Lys in the S3 subsite and for hydrophobic residues, both aliphatic and aromatic, in S2. The S1 subsite exhibited a specificity for the basic residues Arg and Lys. Generally, the specificity of the primed subsites was less strict compared with the non-primed side which showed preference for Arg, Lys and Ala in S'1, Arg, Pro and Gly in S'2 and Lys, Arg and Ser in S'4. By contrast, a strict preference for the basic residues Arg and Lys was found for S'3. Overall, there was a trend for basic residues in alternating subsites and smaller residues in the primed sites compared with the non-primed sites. In addition, there were strict requirements for the amino acids in subsites S3-S1. Fluorescence-quenched peptides from the library with the highest on-resin cleavage were resynthesized and their kinetics of hydrolysis by CPB2.8ΔCTE assessed in solution phase assays. Several good substrates containing the quintessential dipeptide particular to cathepsin-L-like enzymes, -F-R/K-, in P2 and P1 were identified (e.g. Y(NO2)-EKFR↓RGK-K(Abz)G, Abz = 2-aminobenzoyl; kcatKm-1 = 4298 mM-1s-1). However, novel substrates containing the dipeptide -L/I-Q- in P2 and P1 were also well hydrolyzed (e.g. Y(NO2)-YLQ↓GIQK-K(Abz)G; kcatKm-1 = 2583 mM-1s-1). The effect of utilizing different fluorescent donor-quencher pairs on the value of kcatKm-1 was examined Generally, the use of the Abz/Q-EDDnp donor-quencher pair (EDDnp = N-(2,4-dinitrophenyl)ethylenediamine) instead of K(Abz)/Y(NO2) resulted in higher kcatKm-1 values for analogous substrates.
IT **306307-14-2**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(substrate specificity of recombinant cysteine protease from Leishmania mexicana is characterized by combinatorial peptide library approach)
RN 306307-14-2 CAPLUS
CN L-Glutamamide, N-(2-nitrobenzoyl)-L-tyrosyl-L-arginyl-L-phenylalanyl-L-phenylalanyl-L-arginyl-L-asparaginyl-L-arginyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



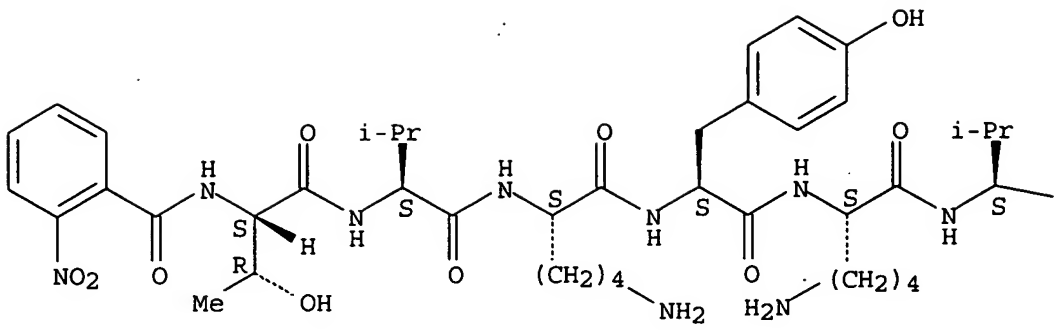
IT **306306-97-8 306307-08-4 306307-20-0**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(substrate specificity of recombinant cysteine protease from Leishmania mexicana is characterized by combinatorial peptide library approach)

RN 306306-97-8 CAPLUS

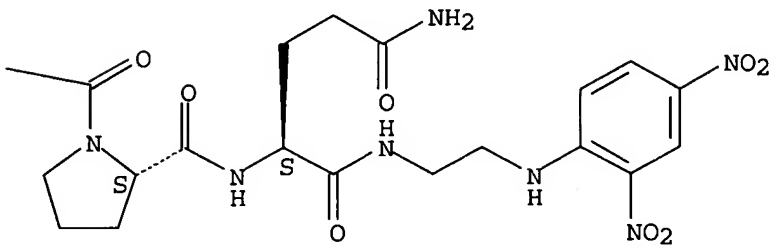
CN L-Glutamamide, N-(2-nitrobenzoyl)-L-threonyl-L-valyl-L-lysyl-L-tyrosyl-L-lysyl-L-valyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



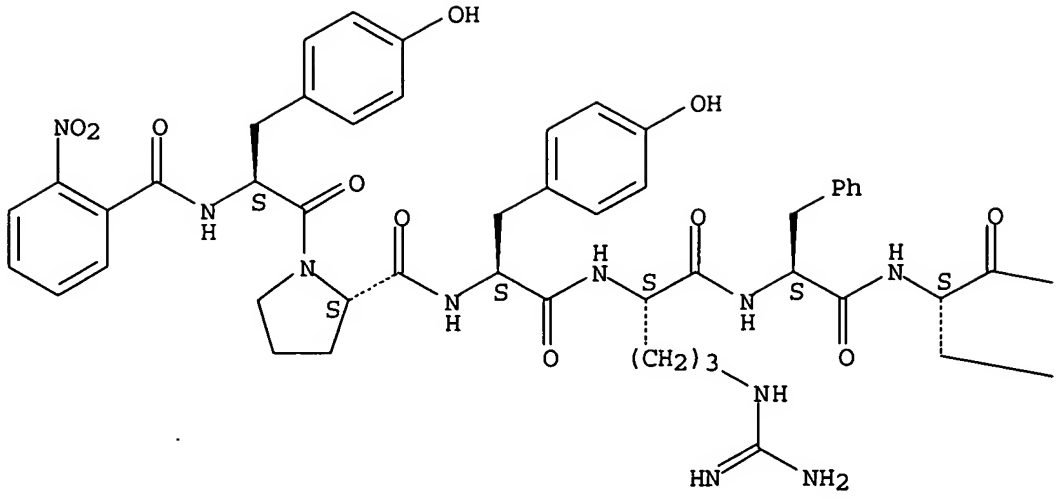
PAGE 1-B



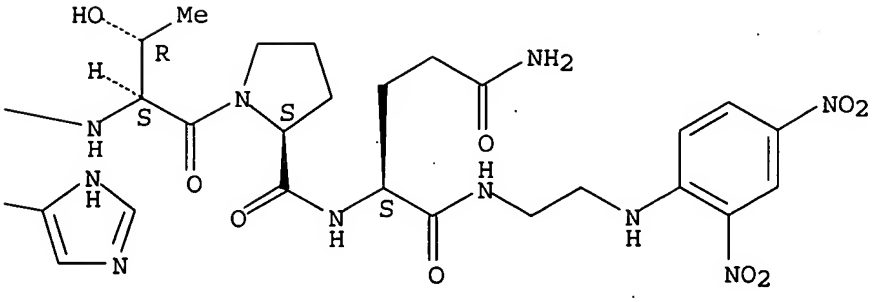
RN 306307-08-4 CAPLUS
CN L-Glutamamide, N-(2-nitrobenzoyl)-L-tyrosyl-L-prolyl-L-tyrosyl-L-arginyl-L-phenylalanyl-L-histidyl-L-threonyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



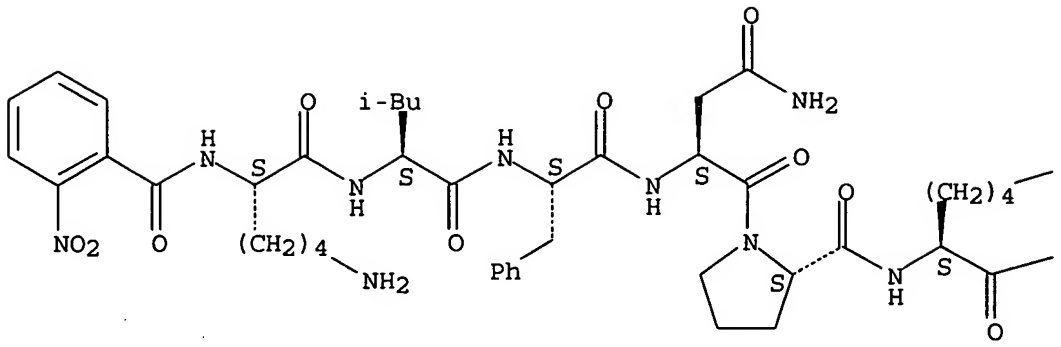
PAGE 1-B



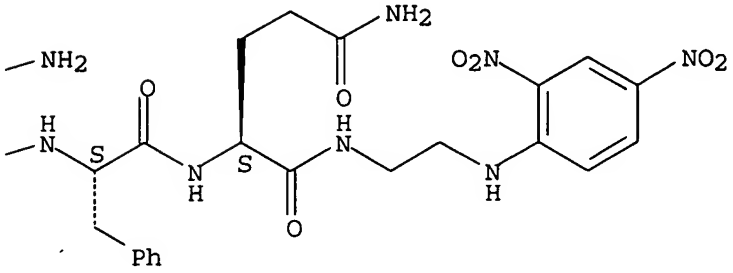
RN 306307-20-0 CAPLUS
CN L-Glutamamide, N2-(2-nitrobenzoyl)-L-lysyl-L-leucyl-L-phenylalanyl-L-asparaginyl-L-prolyl-L-lysyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:592695 CAPLUS
DN 133:193488
TI Preparation of Nα-benzyloxycarbonyl-N-(2-anilinoethyl)leucineamides and analogs as cathepsin K inhibitors
IN Altmann, Eva; Lattmann, Rene; Missbach, Martin; Renaud, Johanne
PA Novartis Ag, Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.
SO PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000048993	A1	20000824	WO 2000-EP1197	20000214

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
GB 1999-3548 A 19990216

OS MARPAT 133:193488

AB Title compds., e.g., R1Z1CONHCR2R3CONHCH2CH2NHR [R = (un)substituted Ph; R1 = (un)substituted aryl or -heterocyclyl; R2 = H and R3 = (cyclo)alkyl; CR2R3 = cyclohexylidene; Z1 = bond, CH2O, CH2, OCR4R5; R4,R5 = H or alkyl] were prepared as cathepsin K inhibitors (no data). Thus, 4-(PhCH2O)C6H4NH2.HCl was condensed with 2-oxazolidinone and the product amidated by Nα-benzyloxycarbonylleucine succinimidyl ester to give (S)-PhCH2O2CNHCH(CH2CHMe2)CONHCH2CH2NHC6H4(OCH2PH)-4.

IT **289042-97-3P 289043-05-6P 289043-06-7P**
289043-07-8P 289043-08-9P 289043-09-0P
289043-10-3P 289043-11-4P 289043-13-6P
289043-15-8P 289043-17-0P 289043-18-1P
289043-20-5P 289043-21-6P 289043-23-8P
289043-24-9P 289043-25-0P 289043-26-1P
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289043-57-8P 289043-59-0P 289043-64-7P
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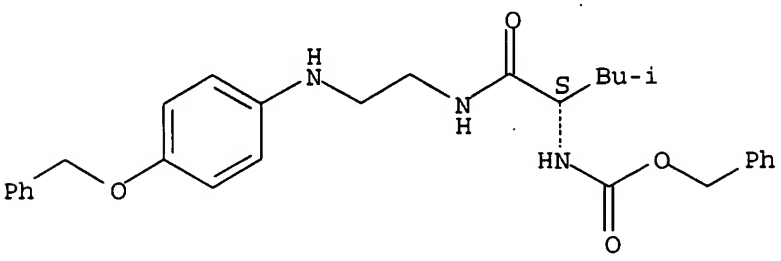
289043-72-7P 289043-73-8P 289043-86-3P
289043-87-4P 289043-89-6P 289043-92-1P
289044-02-6P 289044-04-8P 289044-06-0P
289044-07-1P 289044-17-3P 289044-19-5P
289044-21-9P 289044-23-1P 289044-26-4P
289044-27-5P 289044-29-7P 289044-31-1P
289044-32-2P 289044-36-6P 289044-38-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of Nα-benzyloxycarbonyl-N-(2-anilinoethyl)leucineamides and analogs as cathepsin K inhibitors)

RN 289042-97-3 CAPLUS

CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[[4-(phenylmethoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

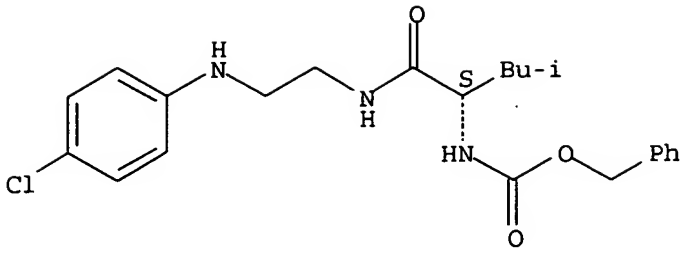
Absolute stereochemistry.



RN 289043-05-6 CAPLUS

CN Carbamic acid, [(1S)-1-[[[2-[(4-chlorophenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289043-06-7 CAPLUS
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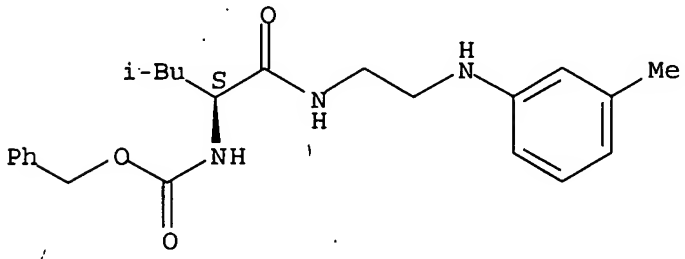
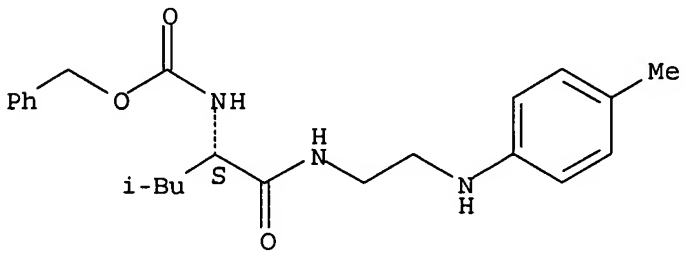
Absolute stereochemistry.



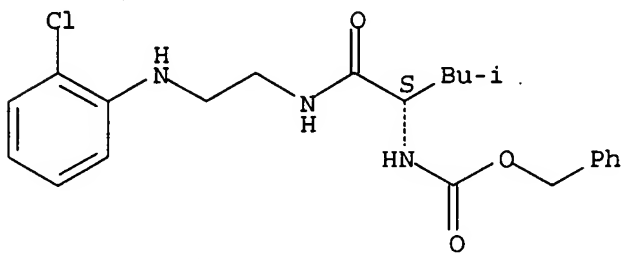
RN 289043-07-8 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[(4-methylphenyl)amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



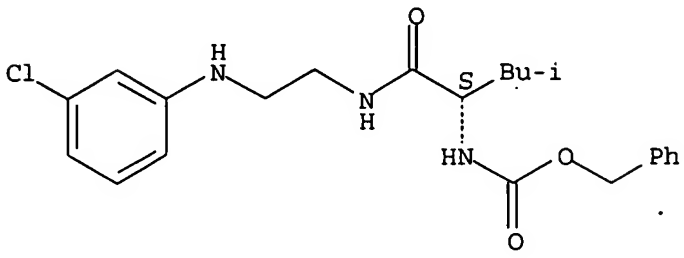
RN 289043-08-9 CAPLUS
CN Carbamic acid, [(1S)-1-[[[2-[(2-chlorophenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289043-09-0 CAPLUS
CN Carbamic acid, [(1S)-1-[[[2-[(3-chlorophenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289043-10-3 CAPLUS
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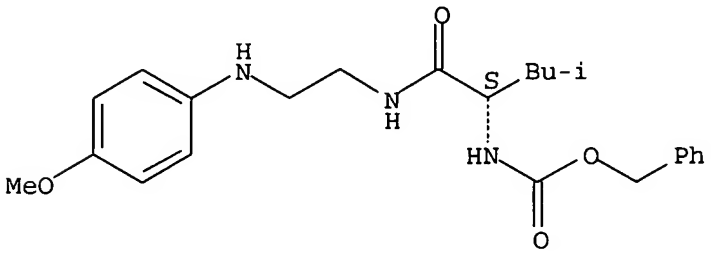
Absolute stereochemistry.



RN 289043-11-4 CAPLUS
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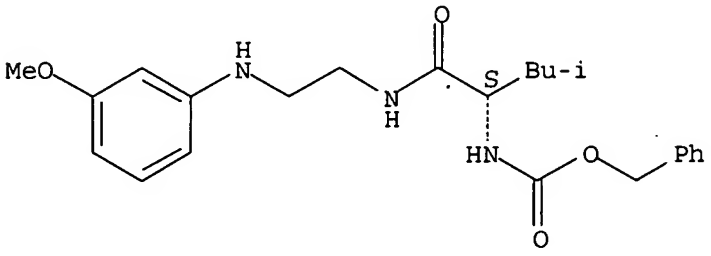
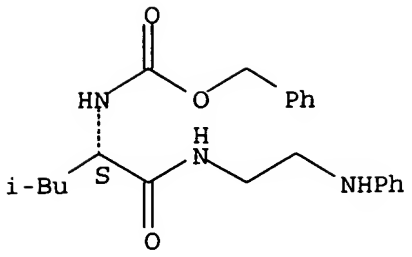
Absolute stereochemistry.



RN 289043-13-6 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-(phenylamino)ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289043-15-8 CAPLUS
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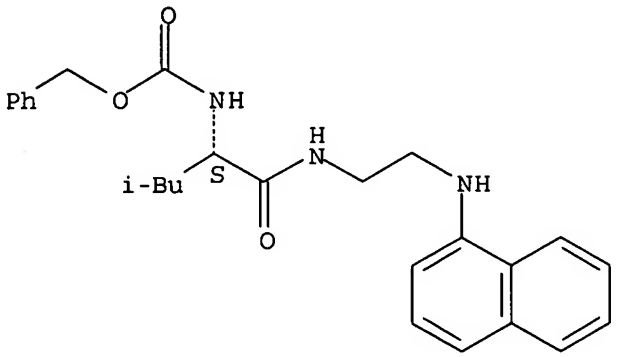
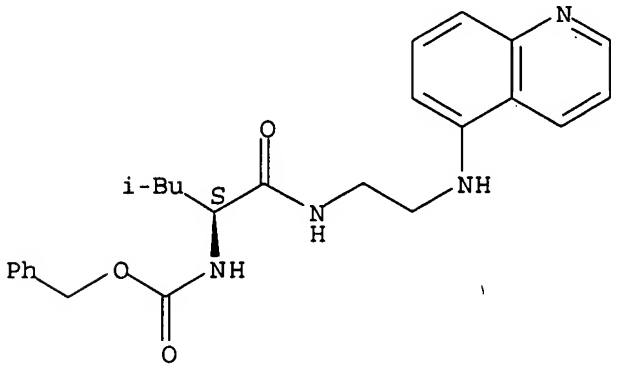
onyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289043-17-0 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-(5-quinolinylamino)ethyl]amino]carbon
yl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

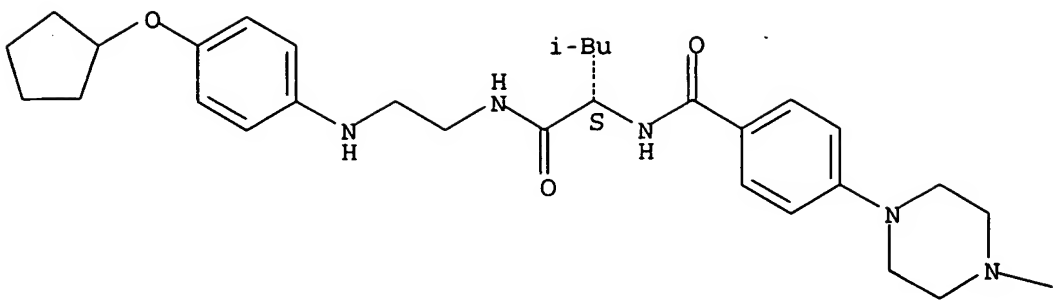
Absolute stereochemistry.



RN 289043-18-1 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[[4-(cyclopentyloxy)phenyl]amino]ethyl]amino]car
bonyl]-3-methylbutyl]-4-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

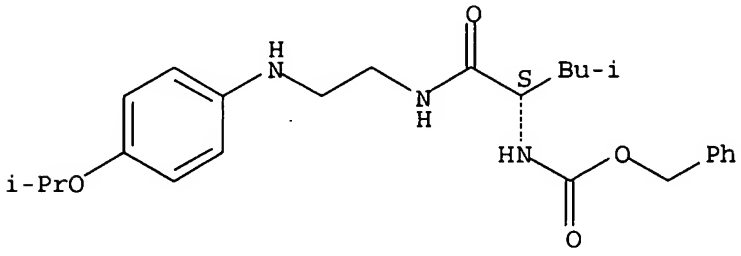
PAGE 1-A



PAGE 1-B

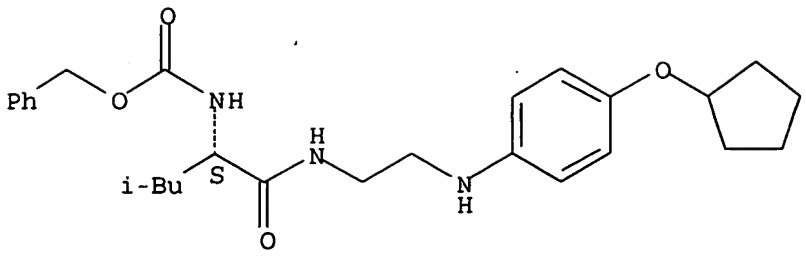
RN 289043-20-5 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[[4-(1-methylethoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



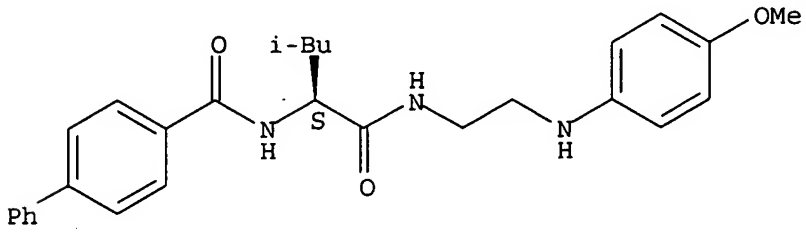
RN 289043-21-6 CAPLUS
CN Carbamic acid, [(1S)-1-[[[2-[[4-(cyclopentyloxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



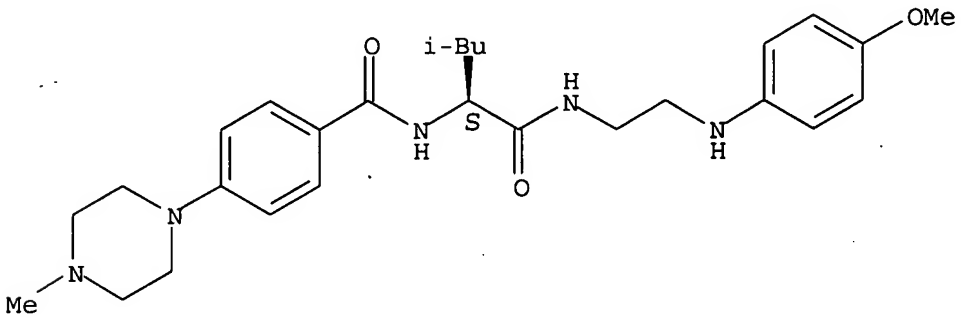
RN 289043-23-8 CAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



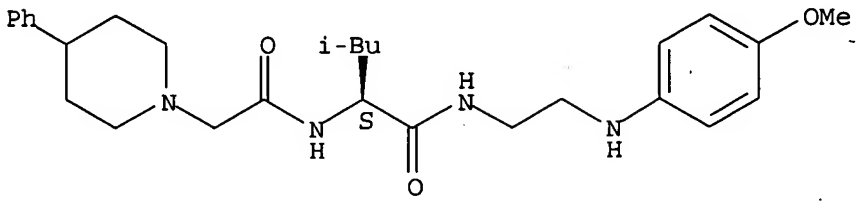
RN 289043-24-9 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



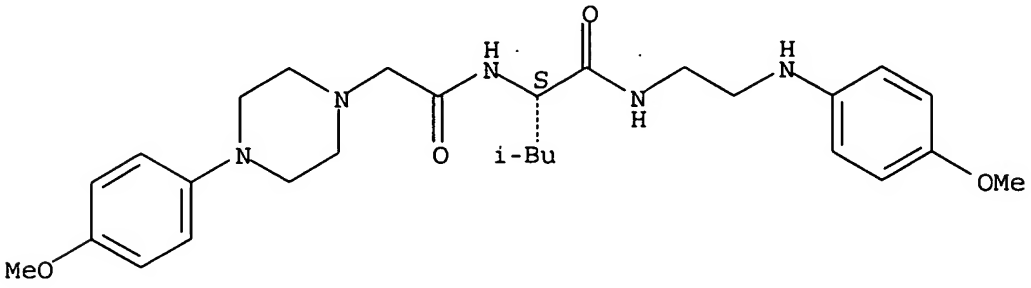
RN 289043-25-0 CAPLUS
CN 1-Piperidineacetamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



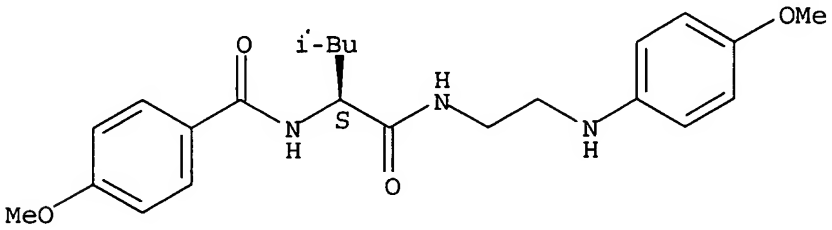
RN 289043-26-1 CAPLUS
CN 1-Piperazineacetamide, 4-(4-methoxyphenyl)-N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



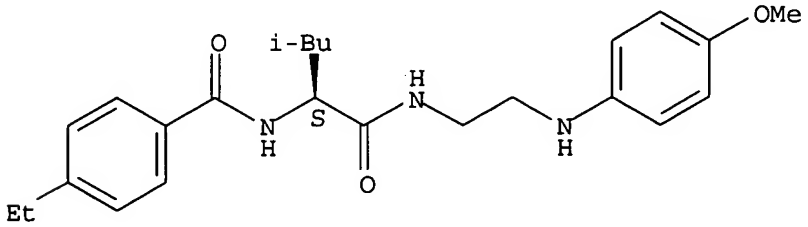
RN 289043-27-2 CAPLUS
CN Benzamide, 4-methoxy-N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



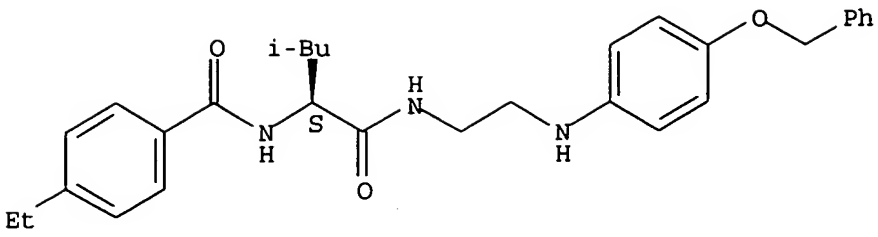
RN 289043-28-3 CAPLUS
CN Benzamide, 4-ethyl-N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



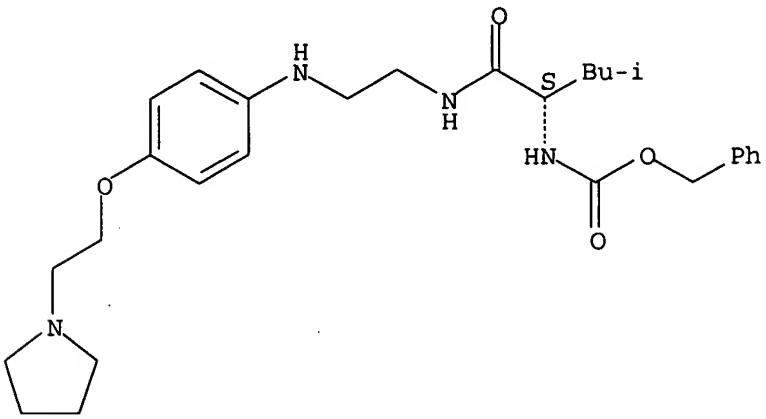
RN 289043-29-4 CAPLUS
CN Benzamide, 4-ethyl-N-[(1S)-3-methyl-1-[[[2-[[4-(phenylmethoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



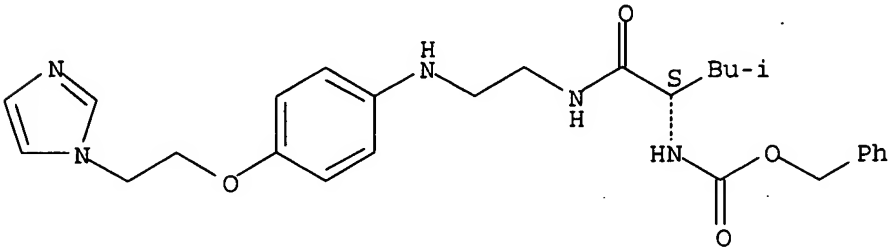
RN 289043-30-7 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[[4-[2-(1-pyrrolidinyl)ethoxy]phenyl]amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



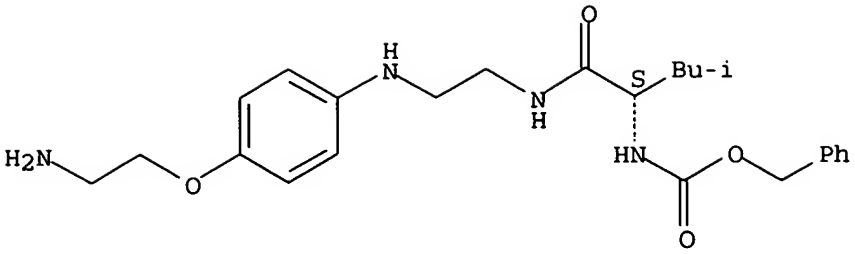
RN 289043-31-8 CAPLUS
CN Carbamic acid, [(1S)-1-[[[2-[[4-[2-(1H-imidazol-1-yl)ethoxy]phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



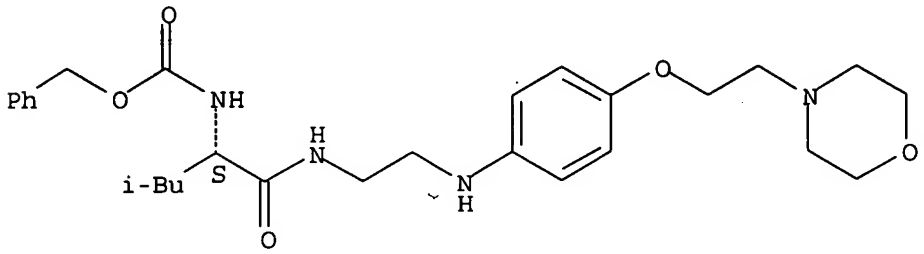
RN 289043-32-9 CAPLUS
CN Carbamic acid, [(1S)-1-[[[2-[[4-(2-aminoethoxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



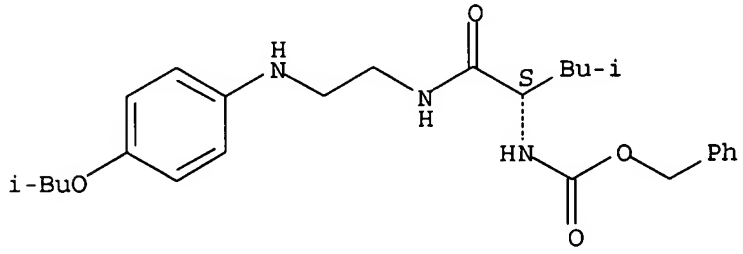
RN 289043-33-0 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[[4-[2-(4-morpholinyl)ethoxy]phenyl]amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



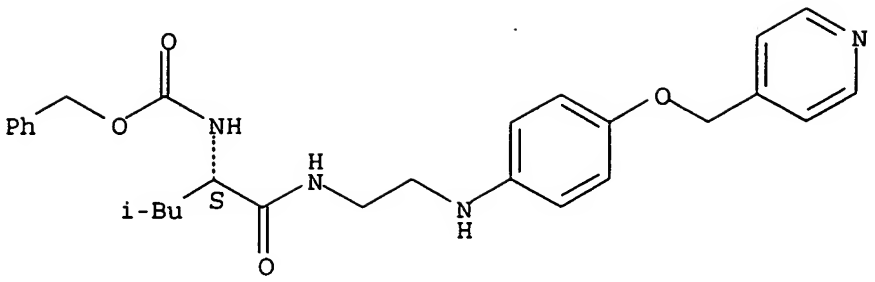
RN 289043-37-4 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[[4-(2-methylpropoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



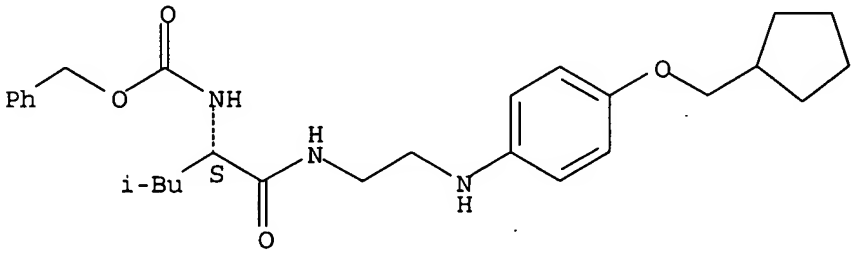
RN 289043-38-5 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[[4-(4-pyridinylmethoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



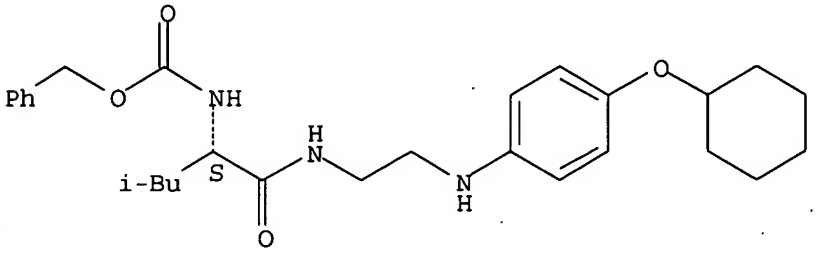
RN 289043-41-0 CAPLUS
CN Carbamic acid, [(1S)-1-[[[2-[[4-(cyclopentylmethoxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



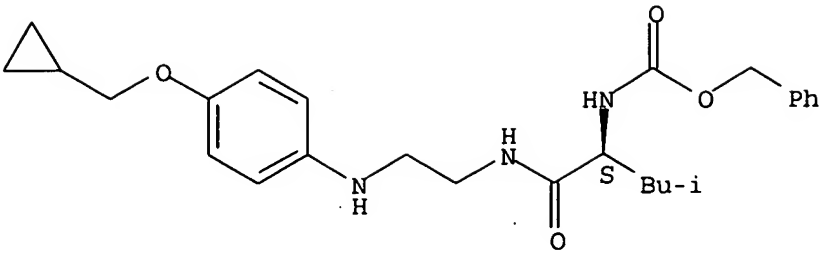
RN 289043-42-1 CAPLUS
CN Carbamic acid, [(1S)-1-[[[2-[[4-(cyclohexyloxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



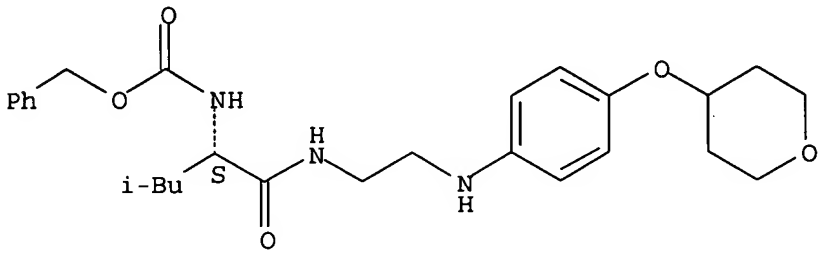
RN 289043-45-4 CAPLUS
CN Carbamic acid, [(1S)-1-[[[2-[[4-(cyclopropylmethoxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



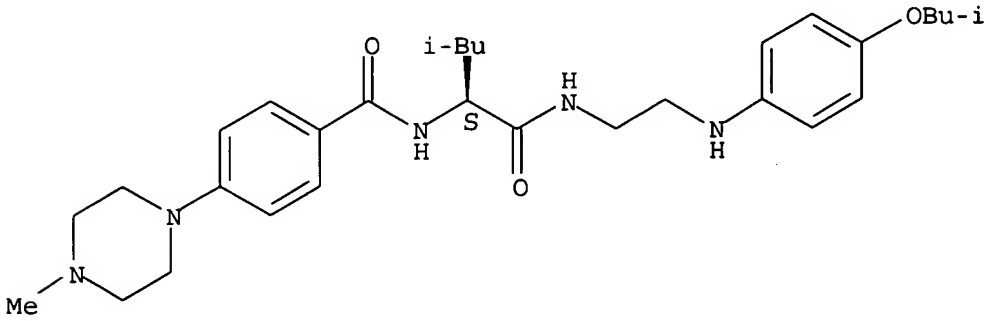
RN 289043-47-6 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[[4-[(tetrahydro-2H-pyran-4-yl)oxy]phenyl]amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289043-49-8 CAPLUS
CN Benzamide, N-[(1S)-3-methyl-1-[[[2-[[4-(2-methylpropoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]-4-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289043-50-1 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[[4-(cyclopentylmethoxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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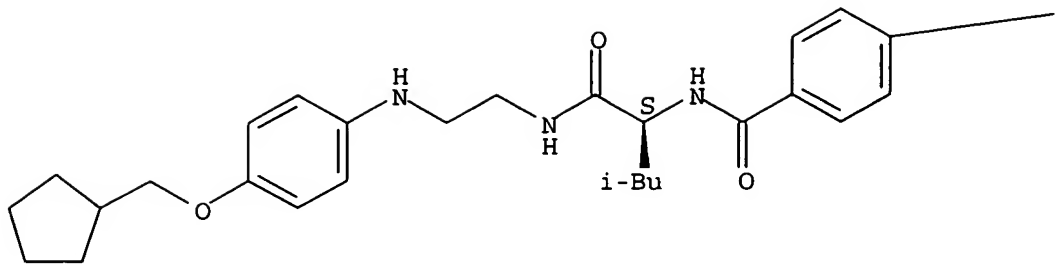

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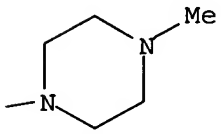
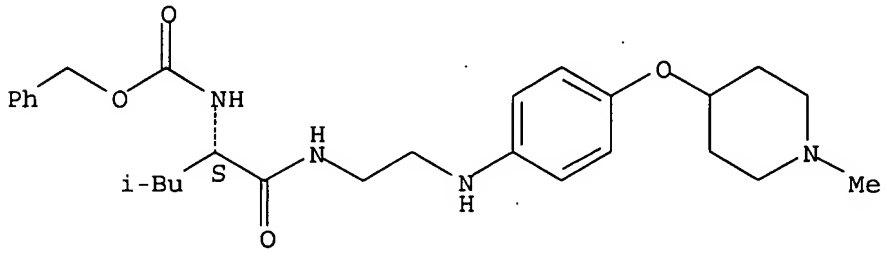


RN 289043-51-2 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[[4-[(1-methyl-4-piperidinyl)oxy]phenyl]amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289043-53-4 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[[4-(cyclopentyloxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-[4-(2-methoxyethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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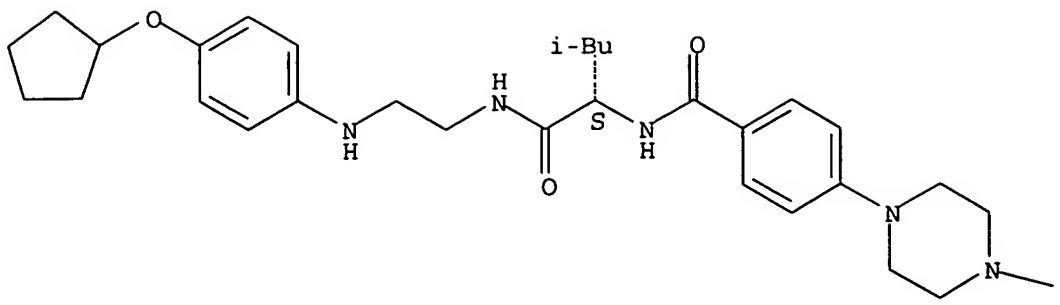

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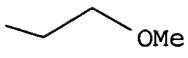

RN 289043-56-7 CAPLUS
CN Benzamide, 4-[4-(2-methoxyethyl)-1-piperazinyl]-N-[(1S)-3-methyl-1-[[[2-[[4-(2-methylpropoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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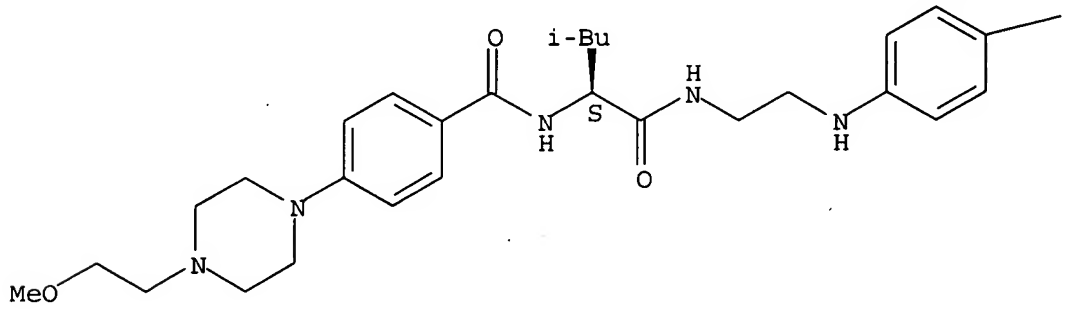

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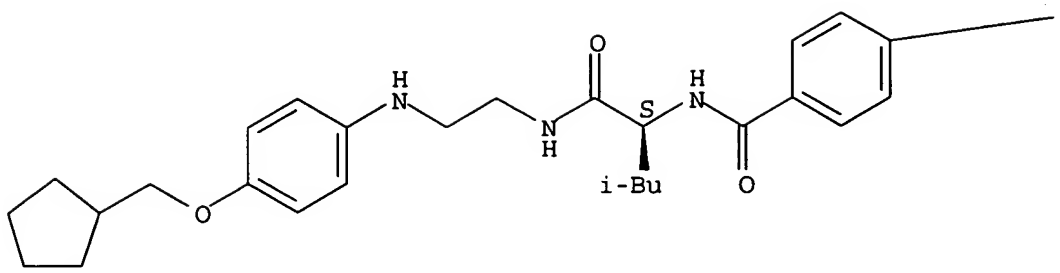
RN 289043-57-8 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[[4-(cyclopentylmethoxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-[4-(2-methoxyethyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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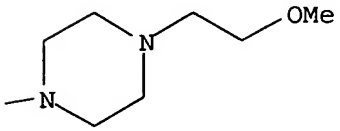
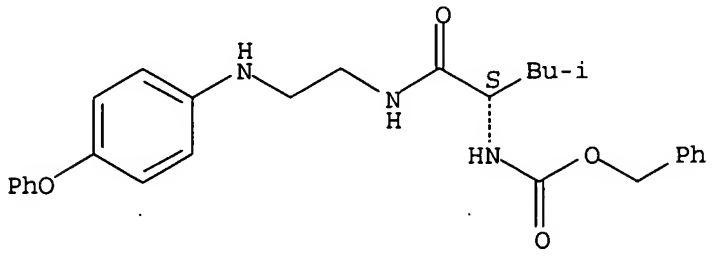


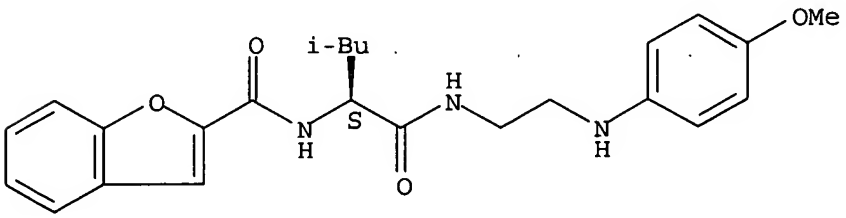
RN 289043-59-0 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[[[2-[(4-phenoxyphenyl)amino]ethyl]amino]carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



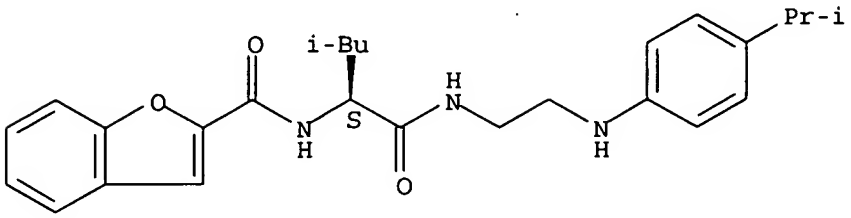
RN 289043-64-7 CAPLUS
CN 2-Benzofurancarboxamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



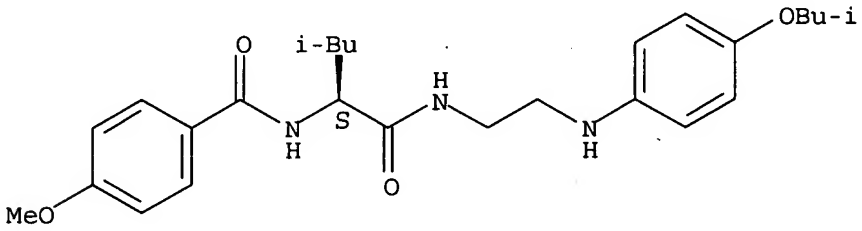
RN 289043-65-8 CAPLUS
CN 2-Benzofurancarboxamide, N-[(1S)-3-methyl-1-[[[2-[[4-(1-methylethyl)phenyl]amino]ethyl]amino]carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



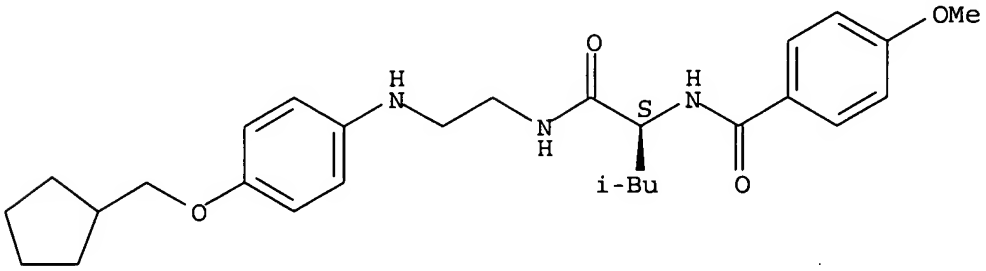
RN 289043-66-9 CAPLUS
CN Benzamide, 4-methoxy-N-[(1S)-3-methyl-1-[[[2-[[4-(2-methylpropoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



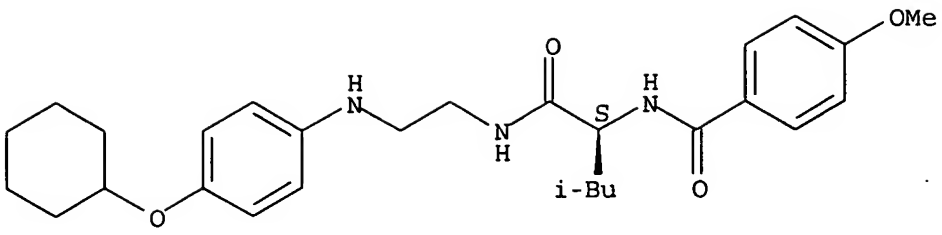
RN 289043-67-0 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[[4-(cyclopentylmethoxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



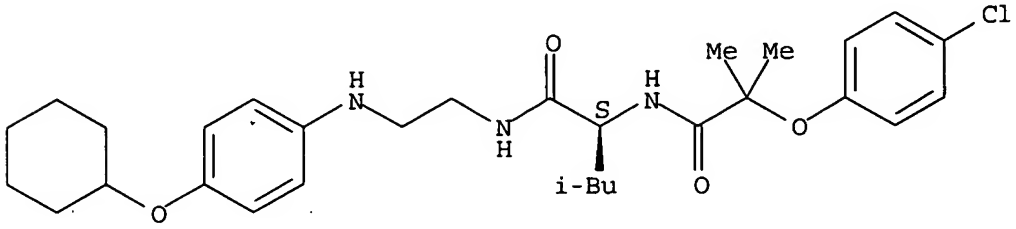
RN 289043-69-2 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[[4-(cyclohexyloxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



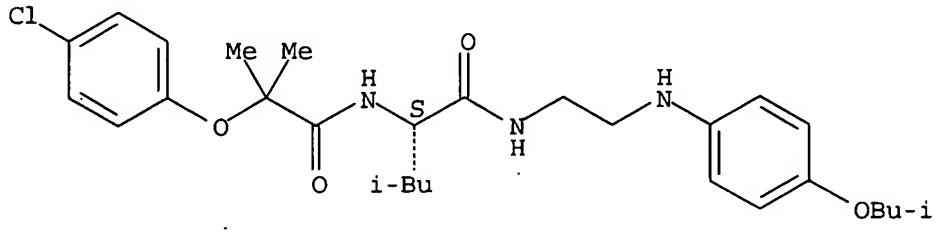
RN 289043-70-5 CAPLUS
CN Pentanamide, 2-[[2-(4-chlorophenoxy)-2-methyl-1-oxopropyl]amino]-N-[2-[[4-(cyclohexyloxy)phenyl]amino]ethyl]-4-methyl-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



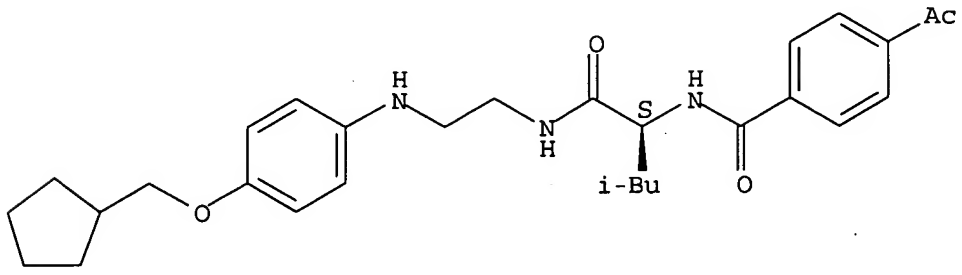
RN 289043-71-6 CAPLUS
CN Pentanamide, 2-[[2-(4-chlorophenoxy)-2-methyl-1-oxopropyl]amino]-4-methyl-N-[2-[[4-(2-methylpropoxy)phenyl]amino]ethyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



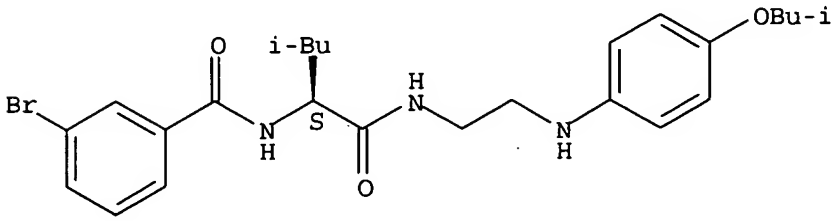
RN 289043-72-7 CAPLUS
CN Benzamide, 4-acetyl-N-[(1S)-1-[[[2-[[4-(cyclopentylmethoxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



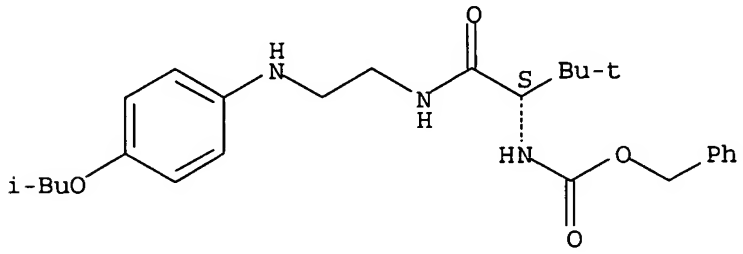
RN 289043-73-8 CAPLUS
CN Benzamide, 3-bromo-N-[(1S)-3-methyl-1-[[[2-[[4-(2-methylpropoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



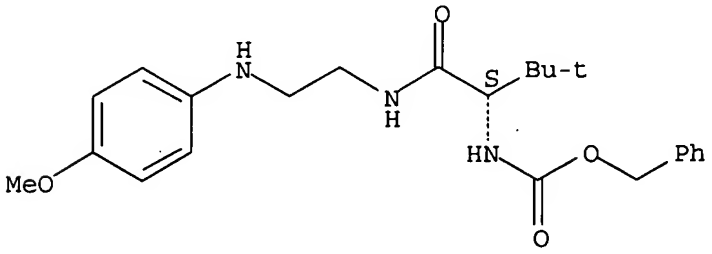
RN 289043-86-3 CAPLUS
CN Carbamic acid, [(1S)-2,2-dimethyl-1-[[[2-[[4-(2-methylpropoxy)phenyl]amino]ethyl]amino]carbonyl]propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



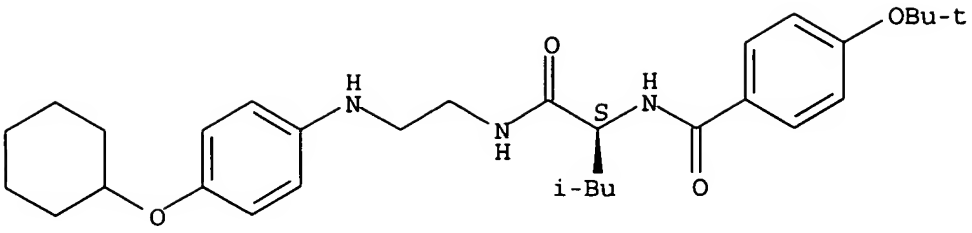
RN 289043-87-4 CAPLUS
CN Carbamic acid, [(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-2,2-dimethylpropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



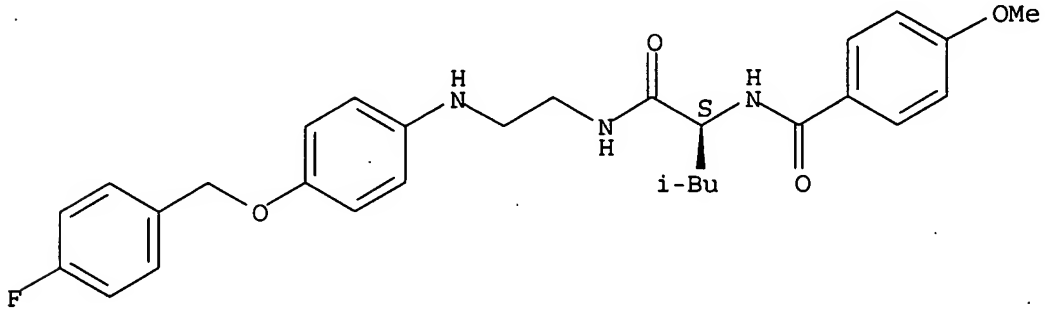
RN 289043-89-6 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[[4-(cyclohexyloxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-(1,1-dimethylethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289043-92-1 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[[4-[(4-fluorophenyl)methoxy]phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

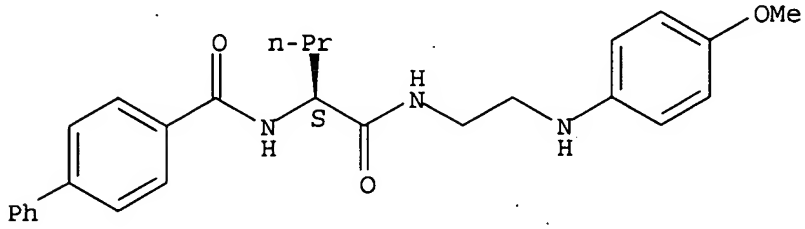


RN 289044-02-6 CAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

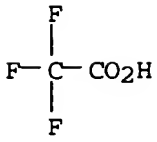
CRN 289044-01-5
CMF C27 H31 N3 O3

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2

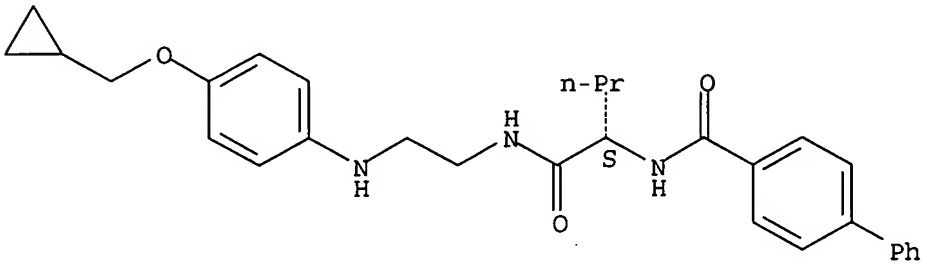


RN 289044-04-8 CAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-1-[[[2-[[4-(cyclopropylmethoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

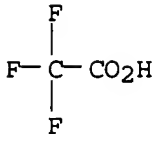
CRN 289044-03-7
CMF C30 H35 N3 O3

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2

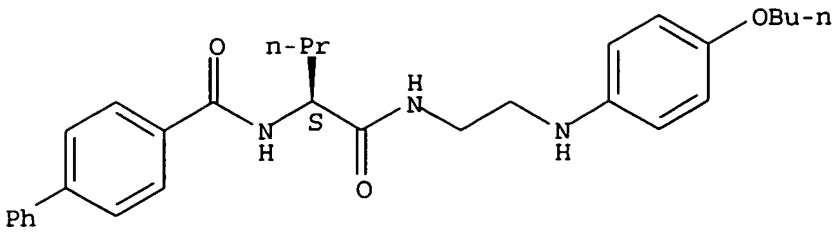


RN 289044-06-0 CAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-1-[[[2-[(4-butoxyphenyl)amino]ethyl]amino]carbonyl]butyl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

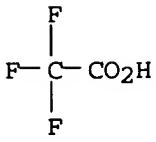
CRN 289044-05-9
CMF C30 H37 N3 O3

Absolute stereochemistry.



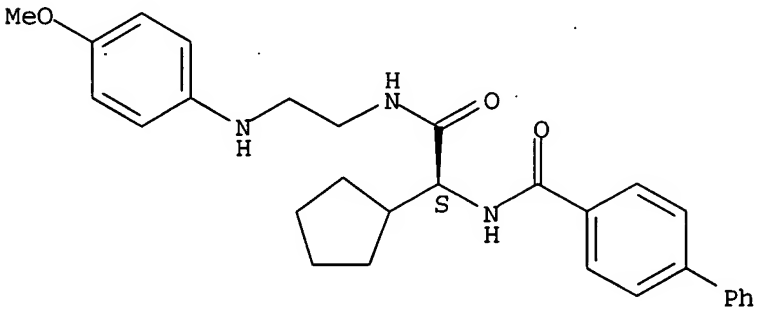
CM 2

CRN 76-05-1
CMF C2 H F3 O2



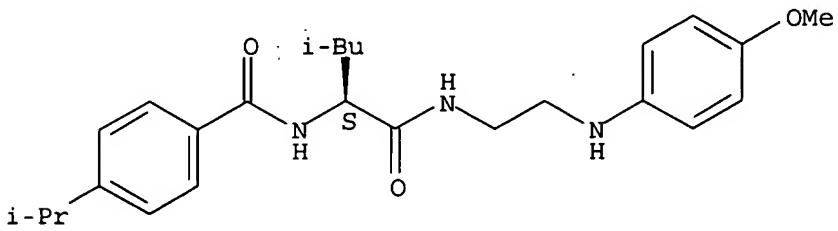
RN 289044-07-1 CAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-1-cyclopentyl-2-[[2-[(4-methoxyphenyl)amino]ethyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289044-17-3 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)

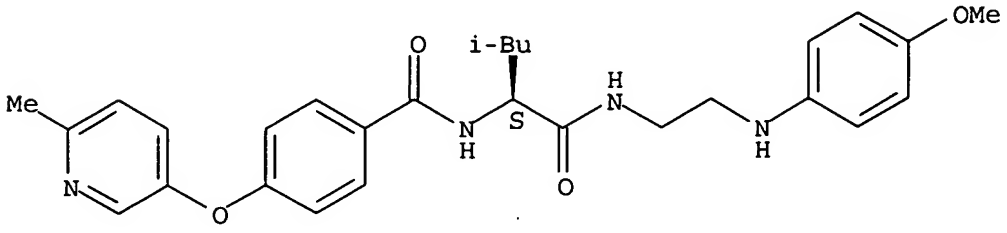
Absolute stereochemistry.



RN 289044-19-5 CAPLUS

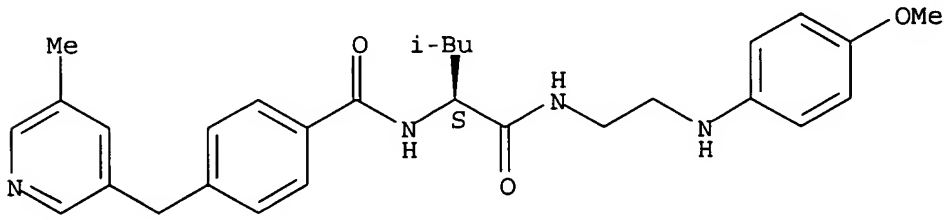
CN Benzamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-[(6-methyl-3-pyridinyl)oxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



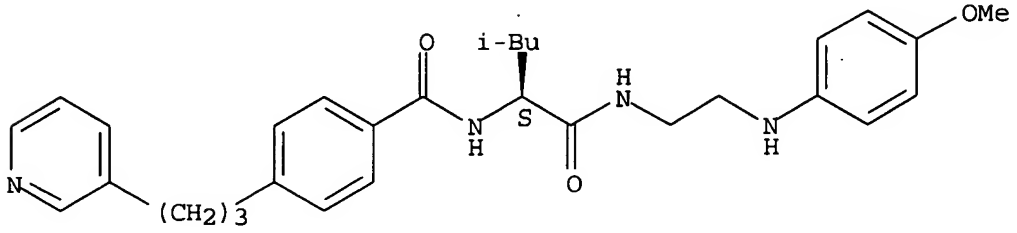
RN 289044-21-9 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-[(5-methyl-3-pyridinyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



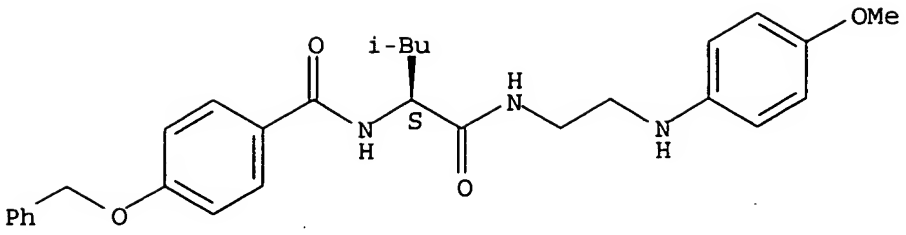
RN 289044-23-1 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-[3-(3-pyridinyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



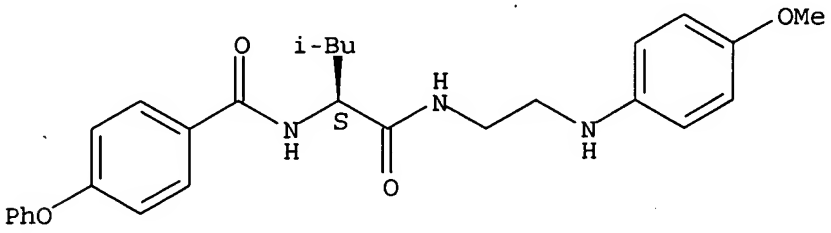
RN 289044-26-4 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-(phenylmethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



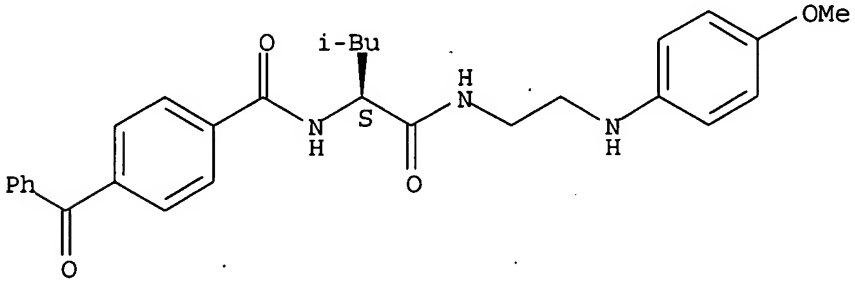
RN 289044-27-5 CAPLUS
CN Benzamide, N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-4-phenoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



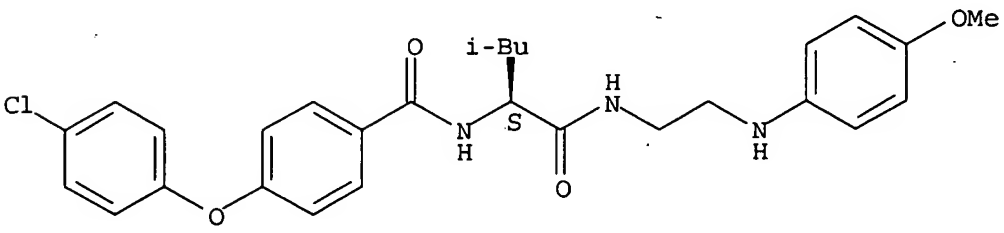
RN 289044-29-7 CAPLUS
CN Benzamide, 4-benzoyl-N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



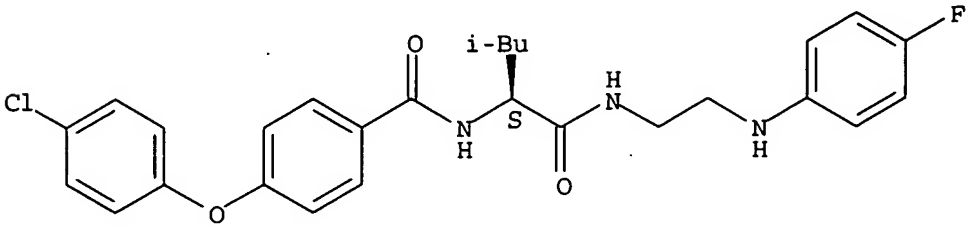
RN 289044-31-1 CAPLUS
CN Benzamide, 4-(4-chlorophenoxy)-N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



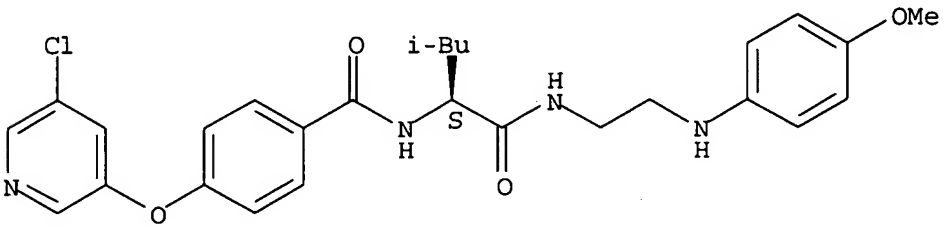
RN 289044-32-2 CAPLUS
CN Benzamide, 4-(4-chlorophenoxy)-N-[(1S)-1-[[[2-[(4-fluorophenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



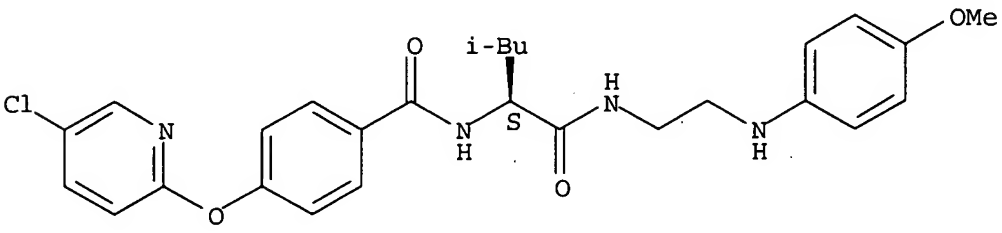
RN 289044-36-6 CAPLUS
CN Benzamide, 4-[(5-chloro-3-pyridinyl)oxy]-N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 289044-38-8 CAPLUS
CN Benzamide, 4-[(5-chloro-2-pyridinyl)oxy]-N-[(1S)-1-[[[2-[(4-methoxyphenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



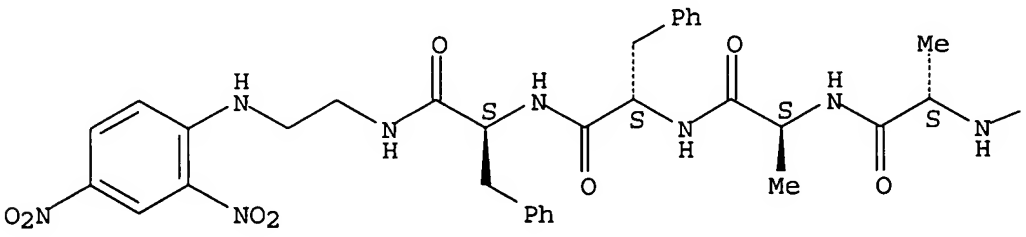
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 34 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:530684 CAPLUS
DN 133:263082
TI A study of aspartyl proteases using intramolecularly quenched fluorogenic peptide substrates
AU Filippova, I. Yu.; Lysogorskaya, E. N.; Lavrenova, G. I.; Oksenoit, E. S.;

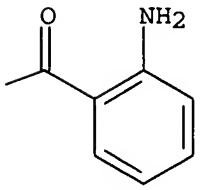
Suvorov, L. I.; Starovoitova, V. V.
CS Chemical faculty, Moscow State University, Moscow, 119899, Russia
SO Russian Journal of Bioorganic Chemistry (Translation of Bioorganicheskaya Khimiya) (2000), 26(3), 169-173
CODEN: RJBCET; ISSN: 1068-1620
PB MAIK Nauka/Interperiodica
DT Journal
LA English
AB A series of fluorogenic tetra-, penta-, and hexapeptide substrates of the general structure Abz-X-Phe-Phe-Y-Ded or (-pNa in place of -Ded), where X = Ala, Ala-Ala, or Val-Ala and Y = -, Ala, or Ala-Ala, were proposed. Kinetic parameters of hydrolysis of these substrates by pepsin, cathepsin D, human gastricsin, pig pepsin, calf chymosin, and aspergillopepsin A were determined The compds. synthesized proved to be effective substrates for aspartyl proteases of diverse origins.
IT **106076-97-5 296778-87-5**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(study of aspartyl proteases using intramolecularly quenched fluorogenic peptide substrates)
RN 106076-97-5 CAPLUS
CN L-Phenylalaninamide, N-(2-aminobenzoyl)-L-alanyl-L-alanyl-L-phenylalanyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



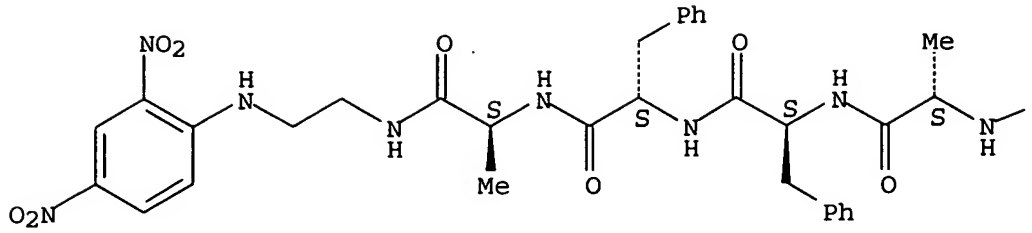
PAGE 1-B



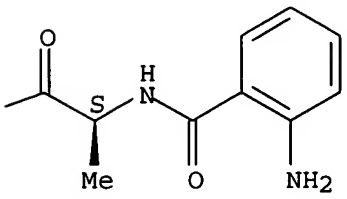
RN 296778-87-5 CAPLUS
CN L-Alaninamide, N-(2-aminobenzoyl)-L-alanyl-L-alanyl-L-phenylalanyl-L-phenylalanyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

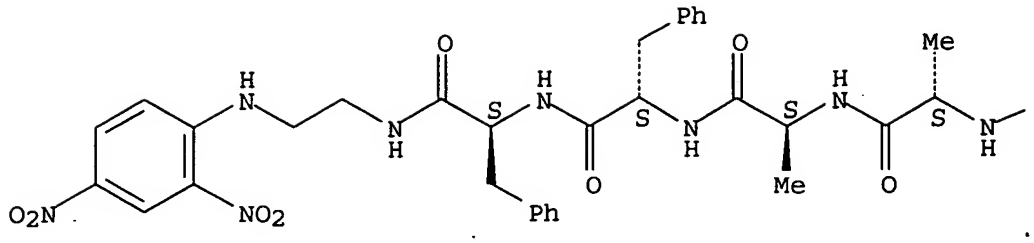


RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

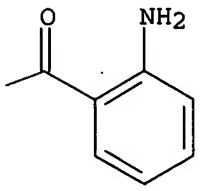
L4 ANSWER 35 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:514779 CAPLUS
DN 133:262986
TI Fluorogenic substrates for assay of chymosin
AU Starovoitova, V. V.; Filippova, I. Yu.; Lysogorskaya, E. N.; Oksenoit, E. S.; Lavrenova, G. I.
CS Department of Natural Compounds Chemistry, School of Chemistry, Lomonosov Moscow State University, Moscow, 119899, Russia
SO Biochemistry (Moscow)(Translation of Biokhimiya (Moscow)) (2000), 65(6), 713-717
CODEN: BIORAK; ISSN: 0006-2979
PB MAIK Nauka/Interperiodica Publishing
DT Journal
LA English
AB The use of fluorogenic substrates with intramol. fluorescence quenching as substrates for chymosin was studied. It was shown that chymosin hydrolyzes the Phe-Phe peptide bond. The effect of pH on the hydrolysis of substrates by chymosin was investigated. The catalytic characteristics of the hydrolysis of the fluorogenic substrates were obtained at the pH optima. The influence of DMF on chymosin activity was studied.
IT **106076-97-5 296778-87-5**
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(fluorogenic substrates for assay of chymosin)
RN 106076-97-5 CAPLUS
CN L-Phenylalaninamide, N-(2-aminobenzoyl)-L-alanyl-L-alanyl-L-phenylalanyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



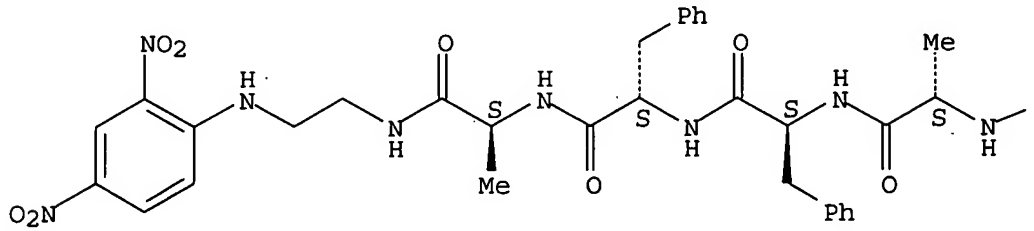
PAGE 1-B



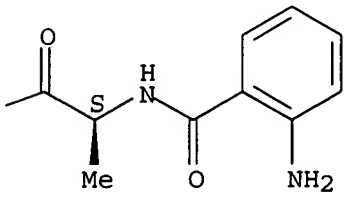
RN 296778-87-5 CAPLUS
CN L-Alaninamide, N-(2-aminobenzoyl)-L-alanyl-L-alanyl-L-phenylalanyl-L-phenylalanyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



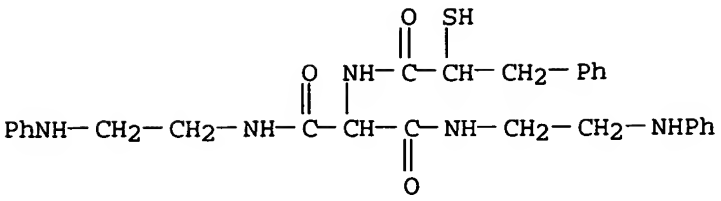
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 36 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:475636 CAPLUS
DN 133:104881
TI Preparation of amidomalonamides as inhibitors of matrix metalloproteinase
IN Warshawsky, Alan; Janusz, Michael J.
PA Aventis Pharmaceuticals Inc., USA

SO PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

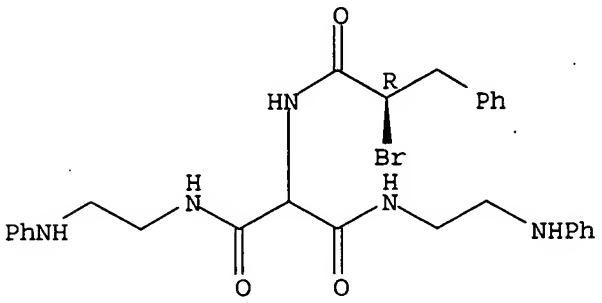
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI WO 2000040552	A1	20000713	WO 1999-US28338		19991130
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
			US 1998-224459	A	19981231
CA 2356966	AA	20000713	CA 1999-2356966		19991130
			US 1998-224459	A	19981231
			WO 1999-US28338	W	19991130
EP 1140818	A1	20011010	EP 1999-961876		19991130
EP 1140818	B1	20030910			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
			US 1998-224459	A	19981231
			WO 1999-US28338	W	19991130
JP 2002534410	T2	20021015	JP 2000-592261		19991130
			US 1998-224459	A	19981231
			WO 1999-US28338	W	19991130
AT 249429	E	20030915	AT 1999-961876		19991130
			US 1998-224459	A	19981231
			WO 1999-US28338	W	19991130
ES 2203226	T3	20040401	ES 1999-961876		19991130
			US 1998-224459	A	19981231
TW 533192	B	20030521	TW 1999-88122979		19991227
			US 1998-224459	A	19981231

OS MARPAT 133:104881
AB The title compds. [I; R1, R2 = H, alkyl, (CH2)aAr1, (CH2)bAr2 (wherein a = 1-6; b = 2-6; Ar1 = (un)substituted Ph, naphthyl, pyridyl; Ar2 = (un)substituted anilino); R3 = alkyl, (CH2)mW, (CH2)pAr3, etc. (m = 2-8; p = 0-10; W = phthalimido; Ar3 = (un)substituted Ph, thienyl, pyridyl, etc.); R4 = H, COR10, CO(CH2)qK, SG (R10 = H, alkyl, Ph, CH2Ph; q = 0-2; K = pyridyl, imidazolyl, etc.; G = 2-pyridyl, (CH2)w(pyridyl), etc.; w = 1-3)], useful for inhibiting matrix metallo-proteinases (no data), were prepared E.g., a multi-step synthesis of malonamide (S)-II, was given. Compds. I are effective at 1-100 mg/kg/day.
IT **283149-48-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amidomalonamides as inhibitors of matrix metalloproteinase)
RN 283149-48-4 CAPLUS
CN Propanediamide, 2-[(2-mercapto-1-oxo-3-phenylpropyl)amino]-N,N'-bis[2-(phenylamino)ethyl]- (9CI) (CA INDEX NAME)



IT **283149-70-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of amidomalonamides as inhibitors of matrix metalloproteinase)
RN 283149-70-2 CAPLUS
CN Propanediamide, 2-[[(2R)-2-bromo-1-oxo-3-phenylpropyl]amino]-N,N'-bis[2-(phenylamino)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 37 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:428832 CAPLUS
DN 133:219372
TI Peptidase Specificity Characterization of C- and N-Terminal Catalytic Sites of Angiotensin I-Converting Enzyme
AU Araujo, Mauricio C.; Melo, Robson L.; Cesari, Maria Helena; Juliano, Maria A.; Juliano, Luiz; Carmona, Adriana K.
CS Department of Biophysics Escola Paulista de Medicina, Universidade Federal de Sao Paulo, Sao Paulo, 04044-020, Brazil
SO Biochemistry (2000), 39(29), 8519-8525
CODEN: BICHAW; ISSN: 0006-2960
PB American Chemical Society
DT Journal
LA English
AB Quenched fluorescence peptides were used to investigate the substrate specificity requirements for recombinant wild-type angiotensin I-converting enzyme (ACE) and two full-length mutants bearing a single functional active site (N- or C-domain). We assayed two series of bradykinin-related peptides flanked by o-aminobenzoic acid (Abz) and N-(2,4-dinitrophenyl)ethylenediamine (EDDnp), namely, Abz-GFSPFXQ-EDDnp and Abz-GFSPFRX-EDDnp (X = natural amino acids), in which the fluorescence appeared when Abz/EDDnp are separated by substrate hydrolysis. Abz-GFSPFFQ-EDDnp was preferentially hydrolyzed by the C-domain while Abz-GFSPFQQ-EDDnp exhibits higher N-domain specificity. Internally quenched fluorescent analogs of N-acetyl-SDKP-OH were also synthesized and assayed. Abz-SDK(Dnp)P-OH, in which Abz and Dnp (2,4-dinitrophenyl) are the fluorescent donor-acceptor pair, was cleaved at the D-K(Dnp) bond with

high specificity by the ACE N-domain (kcat/Km = 1.1 μM-1 s-1) being practically resistant to hydrolysis by the C-domain. The importance of hydroxyl-containing amino acids at the P2 position for N-domain specificity was shown by performing the kinetics of hydrolysis of Abz-TDK(Dnp)P-OH and Abz-YDK(Dnp)P-OH. The peptides Abz-YRK(Dnp)P-OH and Abz-FRK(Dnp)P-OH which were hydrolyzed by wild-type ACE with Km values of 5.1 and 4.0 μM and kcat values of 246 and 210 s-1, resp., have been shown to be excellent substrates for ACE. The differentiation of the catalytic specificity of the C- and N-domains of ACE seems to depend on very subtle variations on substrate-specific amino acids. The presence of a free C-terminal carboxyl group or an aromatic moiety at the same substrate position dets. specific interactions with the ACE active site which is regulated by chloride and seems to distinguish the activities of both domains.

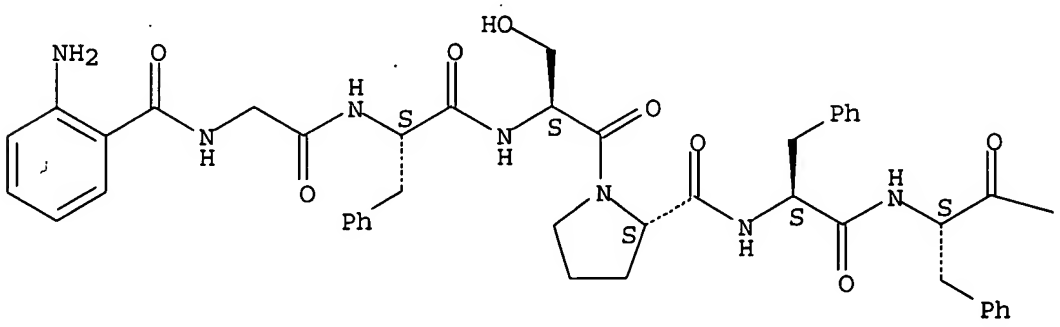
IT **242808-46-4**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(peptidase specificity characterization of C- and N-terminal catalytic sites of angiotensin I-converting enzyme)

RN 242808-46-4 CAPLUS

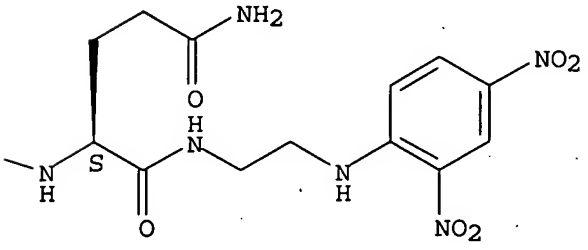
CN L-Glutamamide, N-(2-aminobenzoyl)glycyl-L-phenylalanyl-L-seryl-L-prolyl-L-phenylalanyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 38 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:409953 CAPLUS
DN 133:234306

TI Hydrolysis by plasma kallikrein of fluorogenic peptides derived from prorenin processing site

AU Almeida, P. C.; Chagas, J. R.; Cezari, M. H. S.; Juliano, M. A.; Juliano, L.

CS Escola Paulista de Medicina, Department of Biophysics, Sao Paulo, 04044-020, Brazil

SO Biochimica et Biophysica Acta (2000), 1479(1-2), 83-90
CODEN: BBACAQ; ISSN: 0006-3002

PB Elsevier Science B.V.

DT Journal

LA English

AB Human plasma kallikrein (HPK) activates plasma prorenin to renin, and the physiol. significance of this activation is still unknown. In this paper we investigated the efficiency and the cleavage pattern of the hydrolysis by HPK of the internally quenched fluorescent peptides (qf-peptides) derived from the amino acid sequence of human prorenin cleavage site. The peptide Abz-F-S-Q-P-M-K-R-L-T-L-G-N-T-T-Q-EDDnp (Abz=ortho-aminobenzoic acid, and EDDnp=N-[2,4-dinitrophenyl]-ethylene diamine), that corresponds to the amino acid sequence P7 to P7' of human prorenin cleavage site, is hydrolyzed at the correct processing site (R-L bond) with kcat/Km=85 mM-1 s-1. Alanine was scanned in all positions from P5 to P5' in order to investigate the substrate specificity requirements of HPK. The qf-peptides derived from the equivalent segment of rat prorenin, that has Lys-Lys as basic amino acid pair, and the peptide Abz-NVTSPVQ-EDDnp that contains the proposed cleavage site of rat prorenin have very low susceptibility to hydrolysis by rat plasma kallikrein. These data are according to the previously reported absence of rat plasma prorenin activation by rat plasma kallikrein (RPK), and with the view that prorenin activation in rat requires alternative enzymes and/or mechanism. All the obtained peptides described in this paper were also assayed with bovine trypsin that was taken as a reference protease because it is commonly used to activate prorenin.

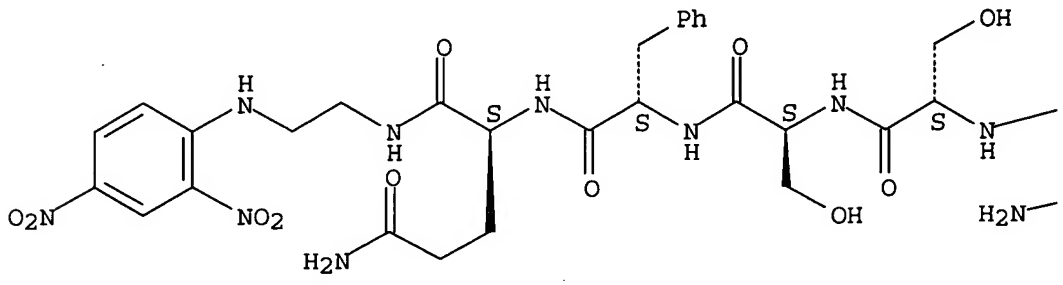
IT **292858-68-5**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(hydrolysis by plasma kallikrein and trypsin of fluorogenic peptides derived from prorenin processing site)

RN 292858-68-5 CAPLUS

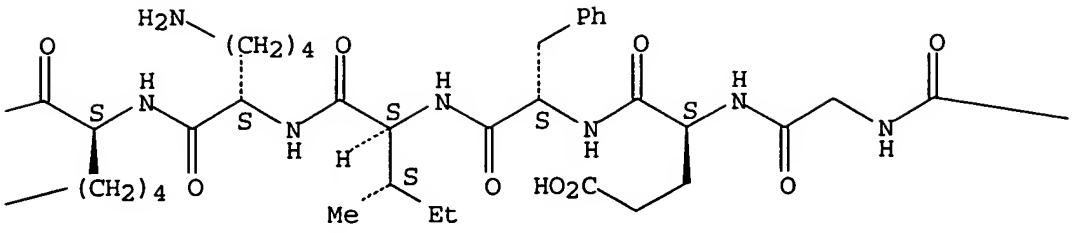
CN L-Glutamamide, N-(2-aminobenzoyl)glycyl-L-α-glutamyl-L-phenylalanyl-L-isoleucyl-L-lysyl-L-lysyl-L-seryl-L-seryl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

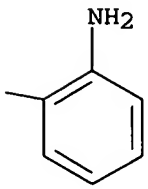
PAGE 1-A



PAGE 1-B



PAGE 1-C



RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:356765 CAPLUS
DN 133:806
TI Endothelin-converting enzyme inhibitors containing amino compounds and their uses
IN Hasegawa, Hirohiko; Takamura, Masahiro; Tsutsumi, Yasushi; Saji, Ikutaro; Ohashi, Naohito
PA Sumitomo Pharmaceuticals Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

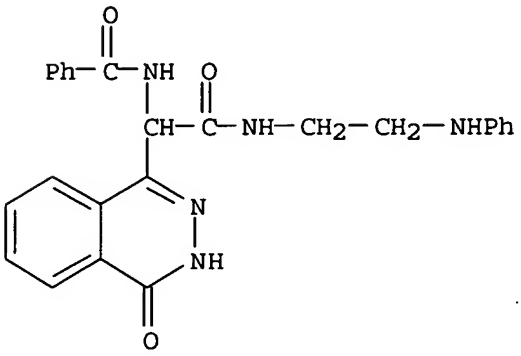
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000143636	A2	20000526	JP 1999-113737	19990421
				JP 1998-248756 A	19980902

OS MARPAT 133:806
AB Pharmaceuticals, useful for prevention or treatment of circulatory diseases, e.g. hypertension, atherosclerosis, angina pectoris, etc., airway constriction, neuronal disorders, endocrine dysfunction, vascular diseases, ulcer, neoplasm, gastric mucosal disorders, endotoxin shock, sepsis, and renal diseases, contain R1GCH(Q1R2)NR3R4 [G = CO, CH2; R1 = R5, NR5R6, OR5, SR5, NR6COR5, NR6SO2R5, CHR7NR5R6, NR7N:CR5R6, CR7:CR5R6; Q1 = direct bond, (un)substituted alkylene, alkenylene, alkynylene; R2 = H, (un)substituted cycloalkyl, (un)substituted cycloalkenyl, (un)substituted aryl or (un)substituted heterocycles], their prodrugs, or their pharmaceutically acceptable salts. N'-phenylcyclohexylmethylene-[2-benzoylamino-2-(3,4-dihydro-4-oxo-phthalazin-1-yl)]acetohydrazide inhibited rat pulmonary endothelin-converting enzyme at IC50 5.6 μM.
IT **270080-48-3P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amino compds. as endothelin-converting enzyme inhibitors and their uses)

RN 270080-48-3 CAPLUS

CN 1-Phthalazineacetamide, α-(benzoylamino)-3,4-dihydro-4-oxo-N-[2-(phenylamino)ethyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 40 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2000:288653 CAPLUS

DN 133:204587

TI Fluorogenic substrates of papain with structural resemblance to the inhibitory center of family 2 cystatins

AU Dwojakowska, Dorota; Dabrowska, Aneta; Lankiewicz, Leszek; Wiczk, Wieslaw; Stachowiak, Krystyna

CS Faculty of Chemistry, University of Gdansk, Gdansk, 80-952, Pol.

SO Peptides 1998, Proceedings of the European Peptide Symposium, 25th, Budapest, Aug. 30-Sept. 4, 1998 (1999), Meeting Date 1998, 632-633. Editor(s): Bajusz, Sandor; Hudecz, Ferenc. Publisher: Akademiai Kiado, Budapest, Hung.
CODEN: 68WKAY

DT Conference

LA English

AB The authors present kinetic data on papain hydrolysis of a series of fluorogenic substrates which resemble the inhibitory center of family 2 cystatins.

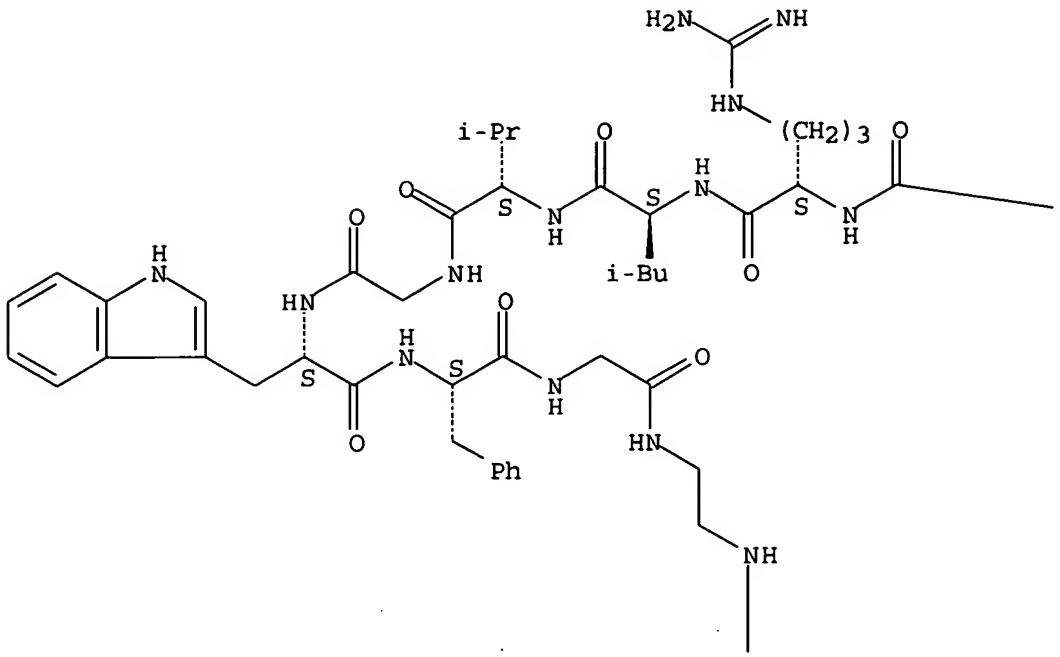
IT **289726-86-9**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(fluorogenic substrates of papain with structural resemblance to inhibitory center of family 2 cystatins)

RN 289726-86-9 CAPLUS

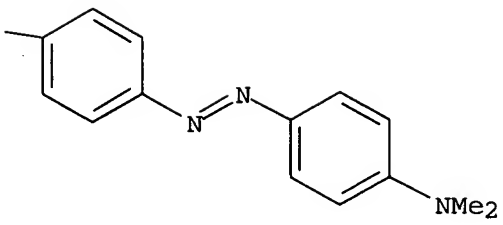
CN Glycinamide, N2-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-arginyl-L-leucyl-L-valylglycyl-L-tryptophyl-L-phenylalanyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

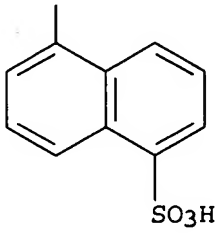
PAGE 1-A



PAGE 1-B



PAGE 2-A

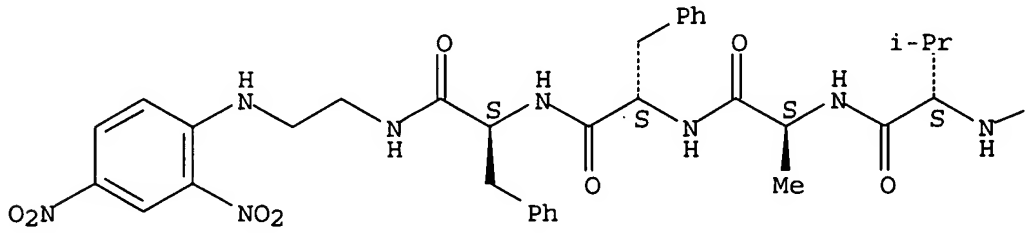


RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

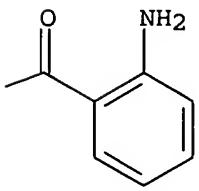
L4 ANSWER 41 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:288402 CAPLUS
DN 132:347920
TI Peptide synthesis catalyzed by subtilisin and thermolysin in organic solvents
AU Getun, Irina V.; Filippova, Irina Yu.; Lysogorskaya, Elena N.; Anisimova, Veronika V.; Oksenoit, Elena S.; Bacheva, Anna V.; Stepanov, Valentin M.
CS Department of Chemistry, Lomonosov Moscow State University, Russia
SO Peptides 1998, Proceedings of the European Peptide Symposium, 25th, Budapest, Aug. 30-Sept. 4, 1998 (1999), Meeting Date 1998, 132-133. Editor(s): Bajusz, Sandor; Hudecz, Ferenc. Publisher: Akademiai Kiado, Budapest, Hung.
CODEN: 68WKAY
DT Conference
LA English
AB A symposium report. The purpose of the present work is to study the possibility of dissolving and using subtilisin 72 and thermolysin as catalysts for peptide bond synthesis in organic solvents.
IT **255884-93-6P**
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(peptide synthesis catalyzed by subtilisin and thermolysin in organic solvents)
RN 255884-93-6 CAPLUS
CN L-Phenylalaninamide, N-(2-aminobenzoyl)-L-valyl-L-alanyl-L-phenylalanyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:270495 CAPLUS
DN 133:70578
TI Probing the specificity of cysteine proteinases at subsites remote from

the active site: analysis of P4, P3, P2' and P3' variations in extended substrates

AU Portaro, Fernada C. Vieira; Santos, Ana Beatriz F.; Cezari, Maria Helena S.; Juliano, Maria Aparecida; Juliano, Luiz; Carmona, Euridice

CS Department of Pharmacology, Instituto Butantan, Sao Paulo, 05503-900, Brazil

SO Biochemical Journal (2000), 347(1), 123-129
CODEN: BIJOAK; ISSN: 0264-6021

PB Portland Press Ltd.

DT Journal

LA English

AB We have determined the kinetic parameters for the hydrolysis by papain, cathepsin B and cathepsin L of internally quenched fluorescent peptides derived from the lead peptides Abz-AAFRSAQ-EDDnp [in which Abz and EDDnp stand for o-aminobenzoic acid and N-(2,4-dinitrophenyl)ethylenediamine resp.], to map the specificity of S4 and S3 subsites, and Abz-AFRSAAQ-EDDnp, to identify the specificity of S2' and S3'. Abz and EDDnp were the fluorescent quencher pair. These two series of peptides were cleaved at the Arg-Ser bond and systematic modifications at P4, P3, P2' and P3' were made. The S4 to S2' subsites had a significant influence on the hydrolytic efficiencies of the three enzymes. Only papain activity was observed to be dependent on S3', indicating that its binding site is larger than those of cathepsins B and L. Hydrophobic amino acids were accepted at S4, S3, S2' and S3' of the three enzymes. The best substrates for cathepsins L and B had Trp and Asn at P2' resp.; variations at this position were less accepted by these enzymes. The best substrates for papain were peptides containing Trp, Tyr or Asn at P3'. Basic residues at P3 and P4 were well accepted by cathepsin L and papain. We also explored the susceptibility of substrates Abz-AFRSXAQ-EDDnp, modified at P2' (X), to human cathepsin B mutants from which one or two occluding loop contacts had been removed. The modifications at His111 (H111A) and His110 (H110A) of cathepsin B led to an increase in kcat values of one or two orders of magnitude. The hydrolytic efficiencies of these cathepsin B mutants became closer to those of papain or cathepsin L.

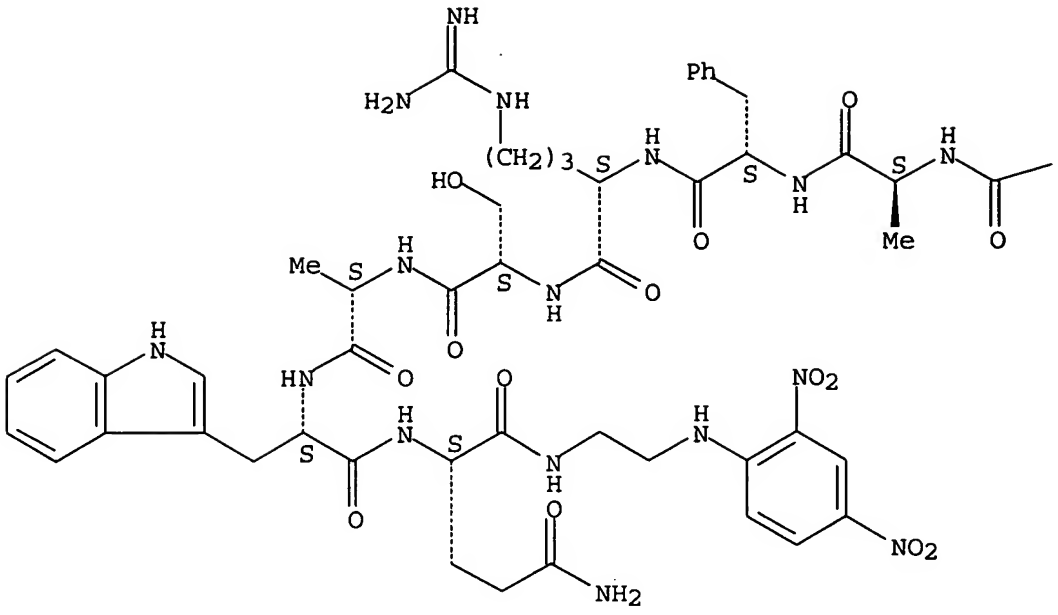
IT **278599-30-7 278599-31-8 278599-32-9**
278599-38-5 278599-39-6
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(probing the specificity of cysteine proteinases at subsites remote from the active site using P4, P3, P2' and P3' variations in extended substrates)

RN 278599-30-7 CAPLUS

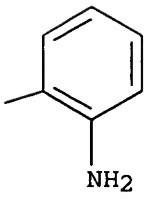
CN L-Glutamamide, N-(2-aminobenzoyl)-L-alanyl-L-phenylalanyl-L-arginyl-L-seryl-L-alanyl-L-tryptophyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



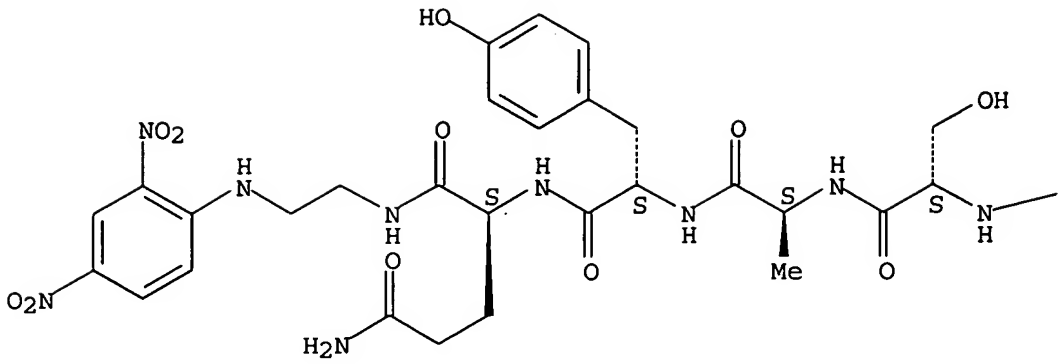
PAGE 1-B



RN 278599-31-8 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-alanyl-L-phenylalanyl-L-arginyl-L-seryl-L-alanyl-L-tyrosyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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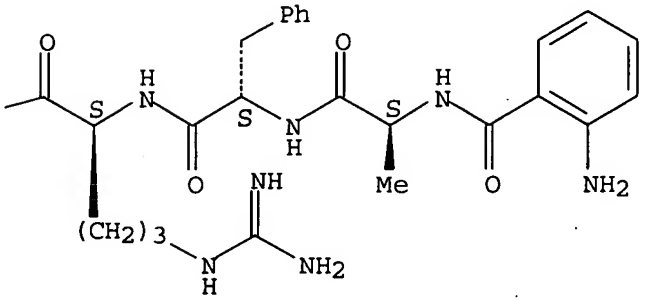
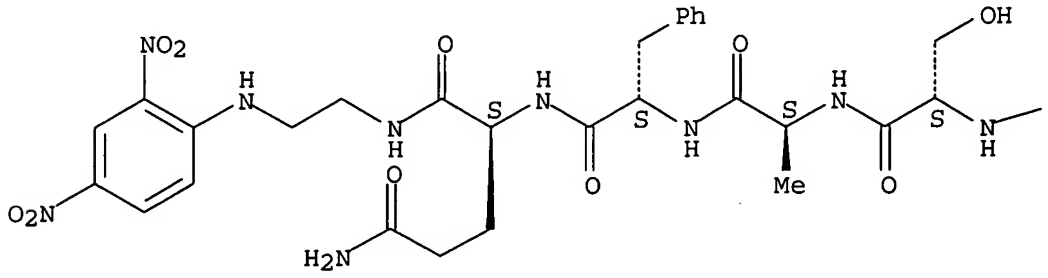
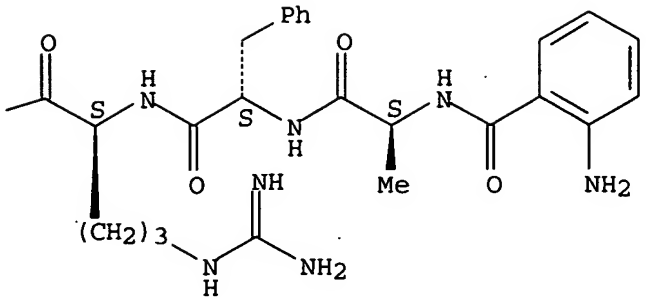


RN 278599-32-9 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-alanyl-L-phenylalanyl-L-arginyl-L-seryl-L-alanyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

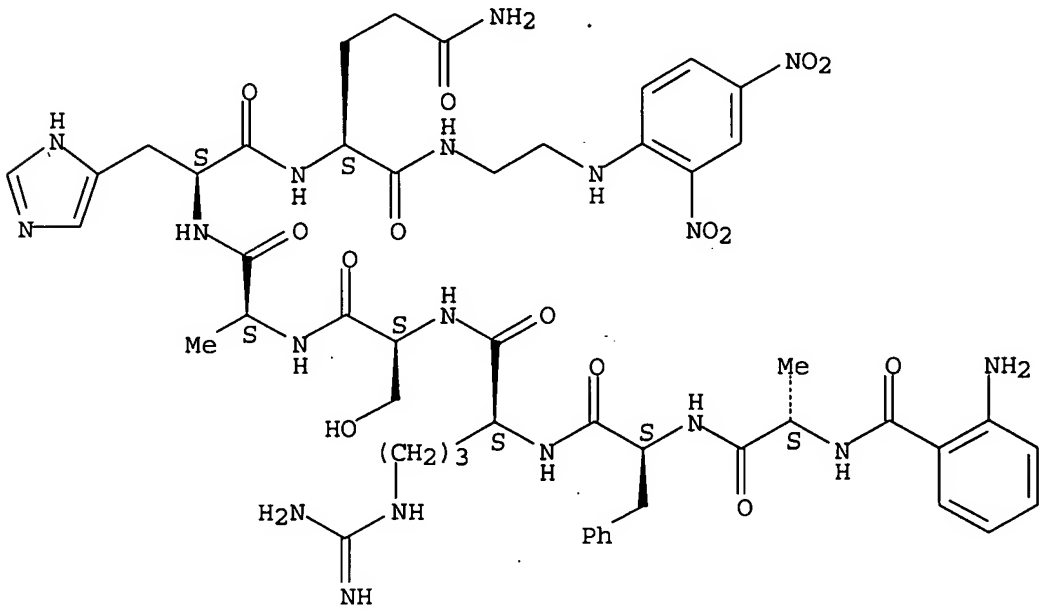
PAGE 1-A





RN 278599-38-5 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-alanyl-L-phenylalanyl-L-arginyl-L-seryl-L-alanyl-L-histidyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

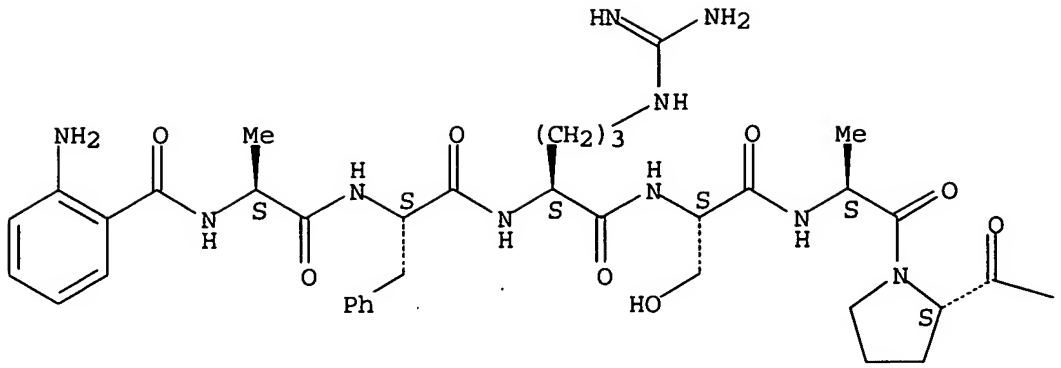
Absolute stereochemistry.



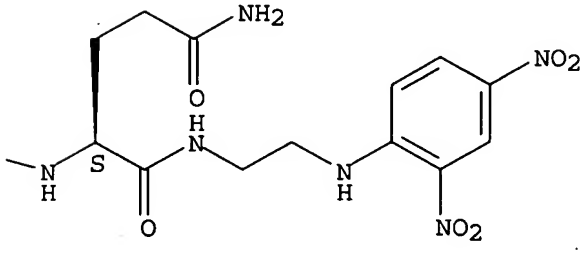
RN 278599-39-6 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-alanyl-L-phenylalanyl-L-arginyl-L-seryl-L-alanyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 43 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:200856 CAPLUS
DN 133:12852
TI End-to-end distance distribution in bradykinin observed by Forster resonance energy transfer
AU de Souza, E. S.; Hirata, I. Y.; Juliano, L.; Ito, A. S.
CS Instituto de Fisica da Universidade de Sao Paulo, Sao Paulo, Brazil
SO Biochimica et Biophysica Acta (2000), 1474(2), 251-261
CODEN: BBACAQ; ISSN: 0006-3002
PB Elsevier Science B.V.
DT Journal
LA English
AB Forster resonance energy transfer (FRET) was used to study the conformational dynamics of bradykinin related peptides. The fluorescent probe aminobenzoic acid (Abz) bound to the N-terminal of bradykinin maintained its fluorescence characteristics, like high quantum yield and excited state decay dominated by a lifetime of 8.3 ns. The binding of the acceptor group N-[2,4-dinitrophenyl]-ethylenediamine (EDDnp) to the C-terminal of Abz labeled bradykinin resulted in a drastic decrease of the fluorescence intensity and in a fastening of the excited state decay. The change of the decay kinetics to an heterogeneous process, precludes the

use of energy transfer models based on a single fixed distance between donor and acceptor. The computational package CONTIN was employed to the anal. of time-resolved fluorescence data, allowing the recovery of a distance distribution between donor and acceptor corresponding to the end-to-end distance of the labeled peptide. The distance distribution reflects the occurrence of distinct conformations for the peptide, that coexist in equilibrium during the fluorescence lifetime. The authors observed three distance populations for bradykinin in water, that merged to two populations when the solvent was trifluoroethanol (TFE). The results were consistent with those obtained from CD spectroscopy, that showed structural flexibility in water and the presence of more defined secondary structure in TFE. The authors also studied several peptides related to bradykinin, and the results emphasized the formation of turns involving the proline residues and the decrease of conformational flexibility induced by using TFE as the solvent.

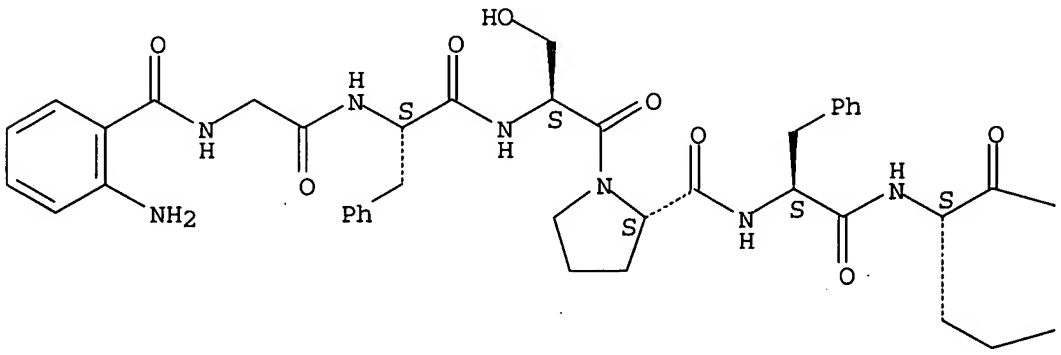
IT **271787-32-7**
RL: PRP (Properties)
(conformational anal. of bradykinin and bradykinin homologs using end to end distance distribution observed by Forster resonance energy transfer)

RN 271787-32-7 CAPLUS

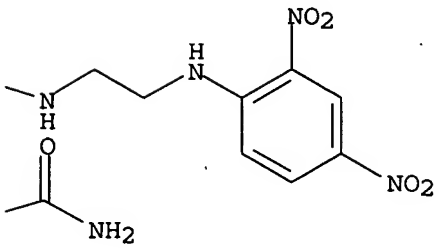
CN L-Glutamamide, N-(2-aminobenzoyl)glycyl-L-phenylalanyl-L-seryl-L-prolyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



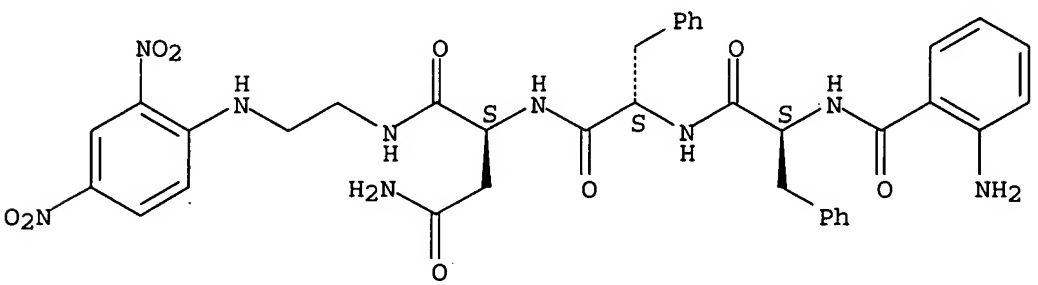
PAGE 1-B



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

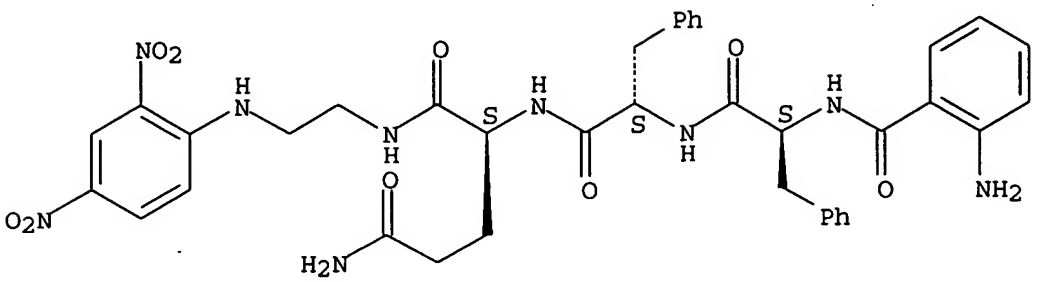
L4 ANSWER 44 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:778430 CAPLUS
DN 132:133979
TI Characterization of a kinin inactivating serine endopeptidase H2 (kininase) from human urine using fluorogenic substrates
AU Quinto, B. M. R.; Juliano, L.; Juliano, M.; Carmona, A. K.; Stella, R. C. R.; Casarini, D. E.
CS Escola Paulista de Medicina, Disciplina de Nefrologia, Depto. de Medicina, Universidade Federal de Sao Paulo, Sao Paulo, CEP 04023-900, Brazil
SO Immunopharmacology (1999), 45(1-3), 223-228
CODEN: IMMUDP; ISSN: 0162-3109
PB Elsevier Science B.V.
DT Journal
LA English
AB We have previously described a kinin-inactivating endopeptidase (H2), which was purified 19-fold from human urine by DEAE-cellulose chromatog. and gel filtration. The enzyme was inhibited 100% by PMSF, TPCK and pOHMB. In the present communication, we further characterized this enzyme using the fluorogenic substrates Abz-RPPGFSPFRQ-EDDnp (Abz-BKQ-EDDnp) and Abz-FRQ-EDDnp (Abz=ortho-aminobenzoic acid; EDDnp=N-[2,4-dinitrophenyl] ethylenediamine). In addition, a rapid, sensitive and specific assay for H2 was developed. The enzyme hydrolyzed bradykinin (BK=RPPGFSPFR) at the F-S peptide bond, which differs from the F-R cleavage site observed in the fluorogenic substrates Abz-BKQ-EDDnp and Abz-FRQ-EDDnp. Other enzymes present in urine, including serine endopeptidase H1, prolyl endopeptidase, and neutral endopeptidase-like enzyme were not able to hydrolyze the related substrate Abz-FRQ-EDDnp. The determined Km for Abz-BKQ-EDDnp and Abz-FRQ-EDDnp were 0.79 μM and 3.02 μM, resp. Using the fluorogenic substrates, we observed that PMSF and p-hydroxymercuribenzoate (pOHMB) irreversibly inhibited H2. E-64 was a weak and reversible inhibitor, whereas EDTA and pepstatin were not inhibitory. The inhibition observed in the presence of pOHMB was partially reversed by 2 mM cysteine. These results suggest that the H2 enzyme belongs to the subfamily of SH-containing serine proteases. Based on the mol. weight of isolated H2 (60 kDa), we believe that this enzyme originated from the kidney and may cleave the kinins filtered through the glomerulus and produced in the kidney.
IT **256531-60-9 256531-61-0**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(characterization of kinin-inactivating serine endopeptidase H2 (kininase) from human urine using fluorogenic substrates)
RN 256531-60-9 CAPLUS
CN L-Aspartamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 256531-61-0 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

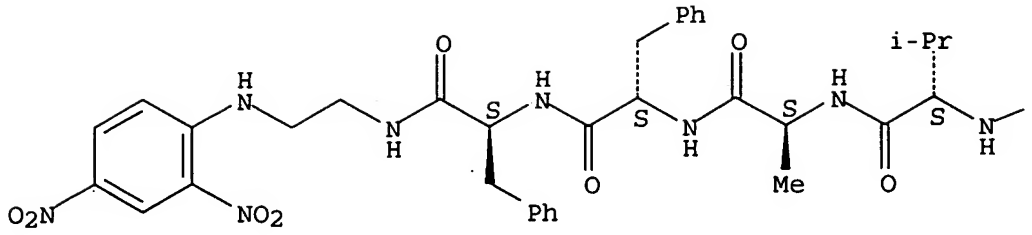


RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 45 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:726865 CAPLUS
DN 132:108286
TI Peptide synthesis catalyzed by subtilisin-72 in organic solvents
AU Getun, I. V.; Filippova, I. Yu.; Lysogorskaya, E. N.; Bacheva, A. V.; Oksenoit, E. S.
CS Faculty of Chemistry, Moscow State University, Moscow, 119899, Russia
SO Bioorganicheskaya Khimiya (1999), 25(8), 591-596
CODEN: BIKHD7; ISSN: 0132-3423
PB MAIK Nauka
DT Journal
LA Russian
OS CASREACT 132:108286
AB The solubility, stability, and activity of native subtilisin-72 and its complex with SDS in polar organic solvents were studied. Peptide bond formation was catalyzed by subtilisin in acetonitrile and by subtilisin-SDS complex in ethanol and isopropanol. Tripeptide Z-Ala-Ala-Leu-pNA (Z = benzyloxycarbonyl, pNA = p-nitroanilide), tetrapeptides A-Ala-Ala-P1-P1'-B [A = Z or o-aminobenzoyl (Abz), P1 = Leu, Phe, Met, Trp, Ile, Tyr, Phe(NO2), or Glu(OMe); P1' = Leu, Phe, Glu, Ala, Ile, Val, or Arg; B = NH2, pNA, or 2-(2,4-dinitrophenyl)aminoethylamine residue (Ded)], pentapeptides Z-Ala-Ala-Leu-Ala-Ala-pNA and Z-Ala-Ala-Leu-Ala-Phe-pNA and hexapeptide Abz-Val-Ala-Phe-Phe-Ala-Ala-Ded were synthesized using the SDS-subtilisin complex. The complex also efficiently catalyzed the oligomerization of tripeptide H-Phe-Ala-Leu-OCH3 in ethanol, which resulted in a 63:37 mixture of trioligomer and tetraoligomer. It was demonstrated that complex SDS-subtilisin is a much more efficient catalyst than subtilisin itself.
IT **255884-93-6P**
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(peptide coupling catalyzed by subtilisin and complex SDS-subtilisin in organic solvents)
RN 255884-93-6 CAPLUS
CN L-Phenylalaninamide, N-(2-aminobenzoyl)-L-valyl-L-alanyl-L-phenylalanyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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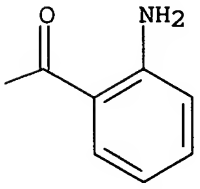

L4 ANSWER 46 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:460389 CAPLUS
DN 131:88206
TI Preparation of substituted β-alanines as integrin-mediated cell adhesion inhibitors
IN Astles, Peter Charles; Harris, Neil Victor; Morley, Andrew David
PA Rhone-Poulenc Rorer Limited, UK
SO PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	WO 9933789	A1	19990708	WO 1998-GB3859		19981223
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	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
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				GB 1997-27532	A	19971223
				US 1998-92602P	P	19980713
				WO 1998-GB3859	W	19981223
	AU 9917719	A1	19990719	AU 1999-17719		19981223
	AU 747907	B2	20020530			
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	ZA 9811834	A	20000623	ZA 1998-11834		19981223

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BR 9814376	A	20001010	BR 1998-14376	19981223
			GB 1997-27532	A 19971223
			US 1998-92602P	P 19980713
			WO 1998-GB3859	W 19981223
EP 1042279	A1	20001011	EP 1998-962586	19981223
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			GB 1997-27532	A 19971223
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			WO 1998-GB3859	W 19981223
TR 200001947	T2	20010122	TR 2000-200001947	19981223
			GB 1997-27532	A 19971223
			US 1998-92602P	P 19980713
JP 2001527061	T2	20011225	JP 2000-526473	19981223
			GB 1997-27532	A 19971223
			US 1998-92602P	P 19980713
			WO 1998-GB3859	W 19981223
RU 2220954	C2	20040110	RU 2000-119738	19981223
			GB 1997-27532	A 19971223
			WO 1998-GB3859	W 19981223
US 6352977	B1	20020305	US 2000-589825	20000608
			US 1998-92602P	P 19980713
			WO 1998-GB3859	A1 19981223
NO 2000003273	A	20000622	NO 2000-3273	20000622
			GB 1997-27532	A 19971223
			US 1998-92602P	P 19980713
			WO 1998-GB3859	W 19981223

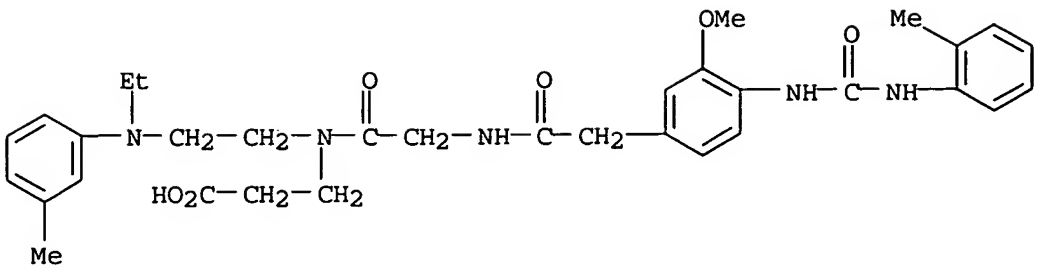
OS MARPAT 131:88206

AB Compds. I [R1 = H, halo, alkyl, alkoxy; X1, X2, X6 = N, CR2; one of X3, X4 and X5 represents CR3 and the others independently represents N or CR2, where R2 = H, halo, alkyl, alkoxy and R3 is -L1(CH2)nC(O)NR4CH2CH2Y (R4 = aryl, heteroaryl, or (un)substituted alkyl, alkenyl, alkynyl, cycloalkenyl, cycloalkyl, or heterocycloalkyl; L1 is a -R9R10 linkage, in which R9 is alkylene, alkenylene, alkynylene and R10 is a direct bond, cycloalkylene, heterocycloalkylene, arylene, heteroaryldiyl, SO2NH, OC(O), CO2, etc.; Y = carboxy or an acid bioisostere, CONH2 or substituted carbamoyl; n = 1-6)] and their prodrugs and pharmaceutically acceptable salts and solvates were prepared Such compds. have valuable pharmaceutical properties, in particular the ability to regulate the interaction of VCAM-1 and fibronectin with the integrin VLA-4(α4β1). Thus, 3-{[({[3-methoxy-4-(3-o-tolylureido)phenyl]acetyl}-N-methylamino)acetyl][3-(2-oxopyrrolidin-1-yl)propyl]amino}propionic acid was prepared from [3-methoxy-4-(3-o-tolylureido)phenyl]acetic acid, sarcosine Et ester hydrochloride, and 3-[3-(2-oxopyrrolidin-1-yl)propylamino]propionic acid Et ester. Preferred compds. of the invention inhibit cell adhesion to fibronectin and VCAM-1 with IC50s in the range 100 nM to 0.01 nM.

IT **229627-08-1P 229627-37-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted β-alanines as integrin-mediated cell adhesion inhibitors)

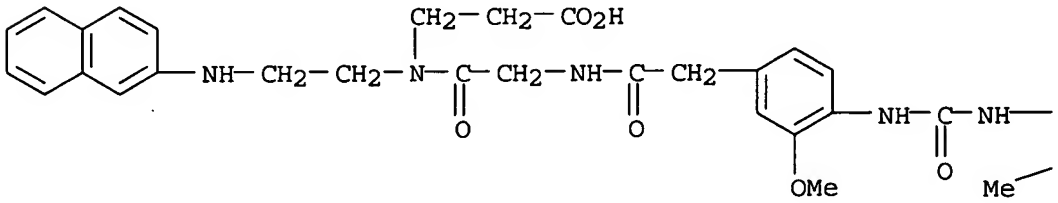
RN 229627-08-1 CAPLUS

CN β-Alanine, N-[[3-methoxy-4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]glycyl-N-[2-[ethyl(3-methylphenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

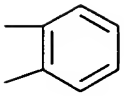


RN 229627-37-6 CAPLUS
CN β-Alanine, N-[[3-methoxy-4-[[[(2-methylphenyl)amino]carbonyl]amino]phenyl]acetyl]glycyl-N-[2-(2-naphthalenylamino)ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:386554 CAPLUS
DN 131:210740
TI Internally quenched fluorogenic substrates for angiotensin I-converting enzyme
AU Araujo, Mauricio C.; Melo, Robson I.; Del Nery, Elaine; Alves, Marcio F. M.; Juliano, Maria A.; Casarini, Dulce E.; Juliano, Luiz; Carmona, Adriana K.
CS Department of Biophysics, Division of Nephrology, Escola Paulista de Medicina, Universidade Federal de Sao Paulo, Sao Paulo, 04044-020, Brazil
SO Journal of Hypertension (1999), 17(5), 665-672
CODEN: JOHYD3; ISSN: 0263-6352
PB Lippincott Williams & Wilkins
DT Journal
LA English
AB The objective here was the development of internally quenched fluorogenic substrates for sensitive and continuous assays of angiotensin I-converting enzyme (ACE). We synthesized internally quenched fluorogenic

bradykinin-related peptides introducing Abz (ortho-aminobenzoic acid) and EDDnp (N-[2,4-dinitrophenyl]-ethylenediamine) at their N- and C-terminal groups, resp., and these were assayed as ACE substrates. We examined two series of peptides, Abz-GFSPFRX-EDDnp and Abz-GFSPFXQ-EDDnp (X, various amino acids). Hydrolysis of the fluorogenic substrates by ACE was followed by continuous recording of the rising fluorescence (λem = 420 nm and λex = 320 nm). The peptides were obtained by solid-phase synthesis or by classical solution methods. Despite of the blocked C-terminal sequences, the internally quenched bradykinin-related peptides were hydrolyzed by ACE. The best substrates for plasma guinea pig ACE were Abz-GFSPFRA-EDDnp and Abz-GFSPFFQ-EDDnp, in which the fluorescence appeared after the first cleavage that occurred at R-A and F-Q bond, resp. This ACE activity was sensitive to NaCl concentration and the optimum pH is greater than 8.0. Measurements of ACE activity with Hip-His-Leu and Abz-GFSPFFQ-EDDnp in the serum of 20 healthy patients correlated closely (r = 0.959). Complete inhibition of the hydrolysis of Abz-GFSPFFQ-EDDnp by human serum was observed with captopril and lisinopril.

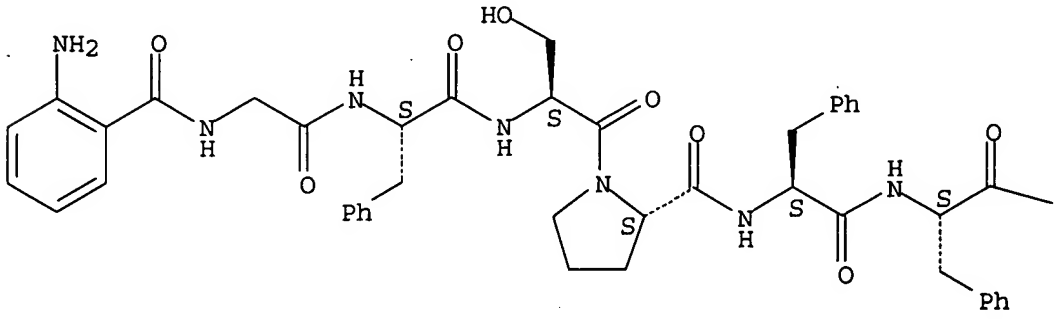
IT **242808-46-4**
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(internally quenched fluorogenic substrates for angiotensin I-converting enzyme)

RN 242808-46-4 CAPLUS

CN L-Glutamamide, N-(2-aminobenzoyl)glycyl-L-phenylalanyl-L-seryl-L-prolyl-L-phenylalanyl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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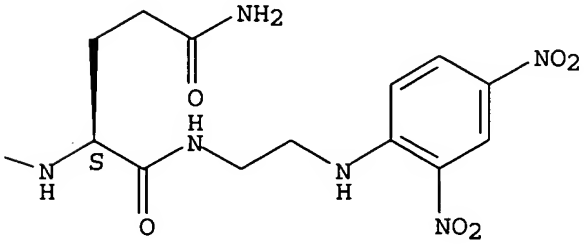


IT **192871-58-2 192871-59-3 242808-48-6**

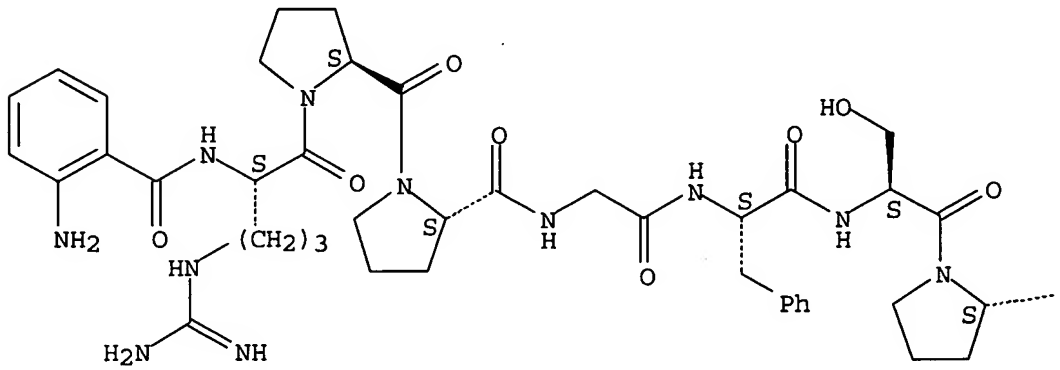
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(internally quenched fluorogenic substrates for angiotensin I-converting enzyme)

RN 192871-58-2 CAPLUS

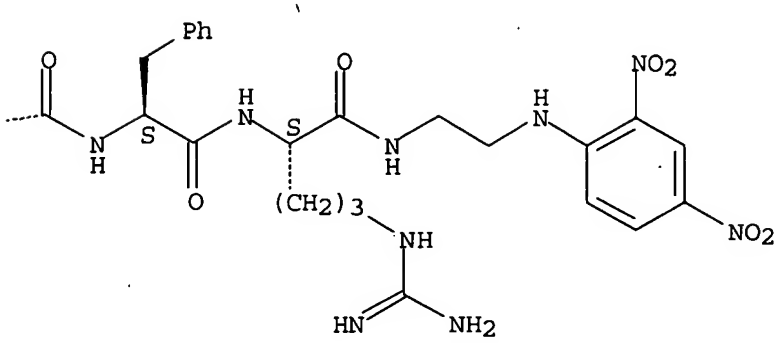
CN Bradykinin, N2-(2-aminobenzoyl)-9-[N-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-argininamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

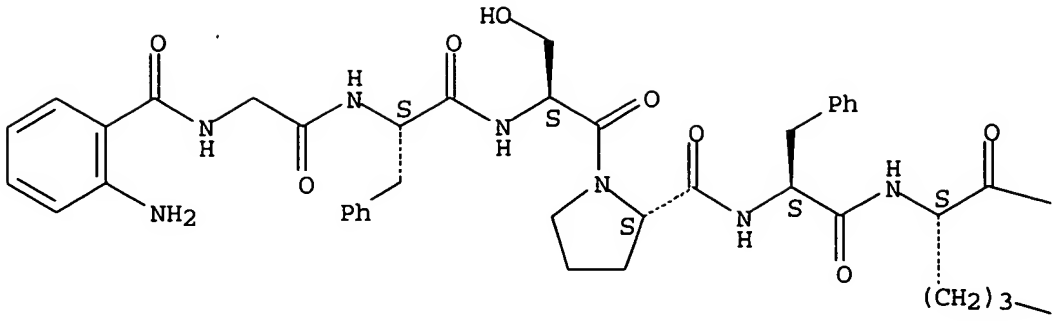


RN 192871-59-3 CAPLUS

CN 2-8-Converstatin, 2-(2-aminobenzoic acid)-8-[N-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-argininamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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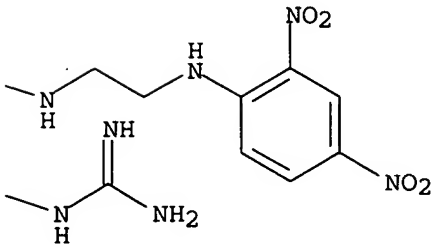
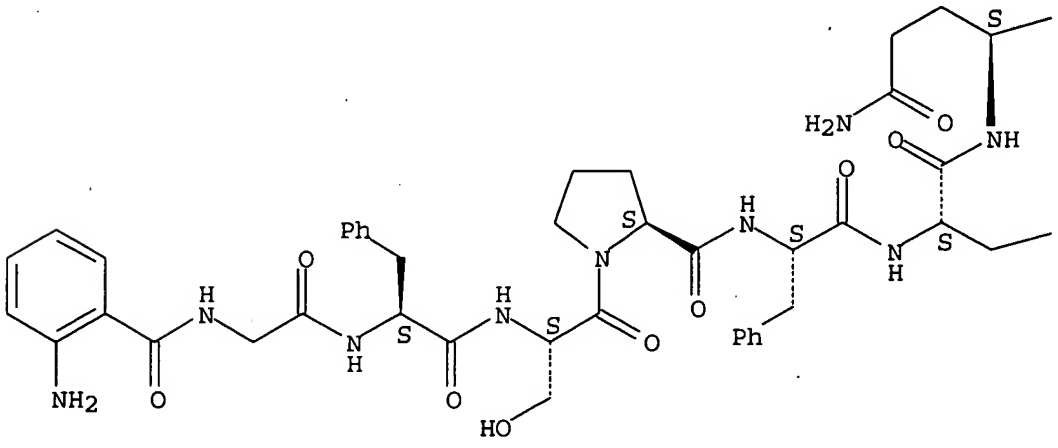
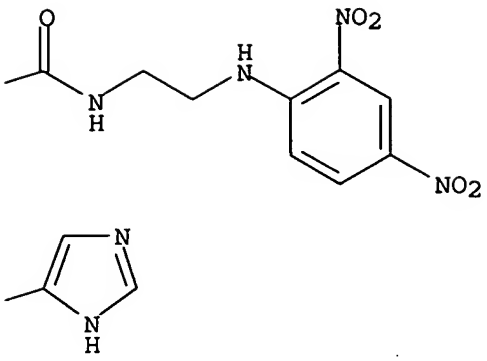


RN 242808-48-6 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)glycyl-L-phenylalanyl-L-seryl-L-prolyl-L-phenylalanyl-L-histidyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 48 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:351877 CAPLUS
DN 131:127109
TI New, sensitive fluorogenic substrates for human cathepsin G based on the sequence of serpin-reactive site loops
AU Rehault, Sophie; Brillard-Bourdet, Michele; Juliano, Maria A.; Juliano, Luiz; Gauthier, Francis; Moreau, Thierry
CS Lab. Enzymology and Protein Chemistry, Univ. Francois Rabelais, Tours, 37032, Fr.
SO Journal of Biological Chemistry (1999), 274(20), 13810-13817
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
AB Cathepsin G has both trypsin- and chymotrypsin-like activity, but studies on its enzymic properties have been limited by a lack of sensitive synthetic substrates. Cathepsin G activity is physiol. controlled by the fast acting serpin inhibitors α1-antichymotrypsin and α1-proteinase inhibitor, in which the reactive site loops are cleaved during interaction with their target enzymes. The authors therefore synthesized a series of intramolecularly quenched fluorogenic peptides based on the sequence of various serpin loops. Those peptides were assayed as substrates for cathepsin G and other chymotrypsin-like enzymes including chymotrypsin and chymase. Peptide substrates derived from the α1-antichymotrypsin loop were the most sensitive for cathepsin G with kcat/Km values of 5-20 mM-1 s-1. Substitutions were introduced at positions P1 and P2 in α1-antichymotrypsin-derived substrates to tentatively improve their sensitivity. Replacement of Leu-Leu in ortho-aminobenzoyl (Abz)-Thr-Leu-Leu-Ser-Ala-Leu-Gln-N-(2,4-dinitrophenyl)ethylenediamine (EDDnp) by Pro-Phe in Abz-Thr-Pro-Phe-Ser-Ala-Leu-Gln-EDDnp produced the most sensitive substrate of cathepsin G ever reported. It was cleaved with a specificity constant kcat/Km of 150 mM-1 s-1. Anal. by mol. modeling of a peptide substrate bound into the cathepsin G active site revealed that, in addition to the protease S1 subsite, subsites S1' and S2' significantly contribute to the definition of the substrate specificity of cathepsin G.
IT **234779-81-8**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP

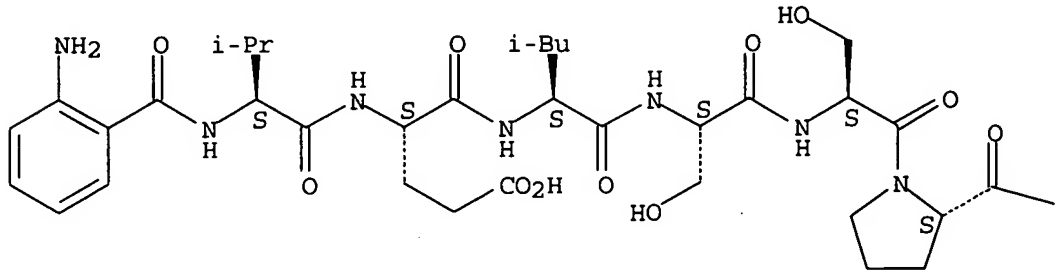
(Properties); BIOL (Biological study); PROC (Process)
(fluorogenic analog of serpin-reactive site loop; new, sensitive fluorogenic substrates for human cathepsin G based on sequence of serpin-reactive site loops)

RN 234779-81-8 CAPLUS

CN L-Glutamamide, N-(2-aminobenzoyl)-L-valyl-L-α-glutamyl-L-leucyl-L-seryl-L-seryl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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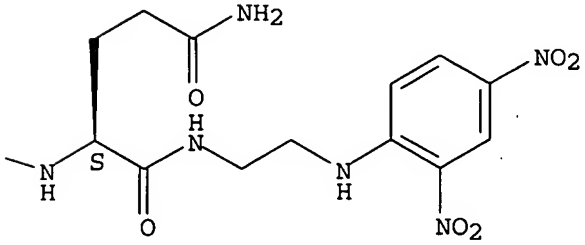


RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 49 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:201385 CAPLUS

DN 131:70076

TI New Fluorogenic Substrates for N-Arginine Dibasic Convertase

AU Csuhai, Eva; Juliano, Maria Aparecida; St. Pyrek, Jan; Harms, Amy C.; Juliano, Luiz; Hersh, Louis B.

CS Department of Biochemistry, University of Kentucky, Lexington, KY, 40536-0084, USA

SO Analytical Biochemistry (1999), 269(1), 149-154
CODEN: ANBCA2; ISSN: 0003-2697

PB Academic Press

DT Journal

LA English

AB N-Arginine dibasic (NRD) convertase is a recently described peptidase capable of selectively cleaving peptides between paired basic residues. The characterization of this unique peptidase has been hindered by the fact that no facile assay procedure has been available. Here we report the development of a rapid and sensitive assay for NRD convertase, based

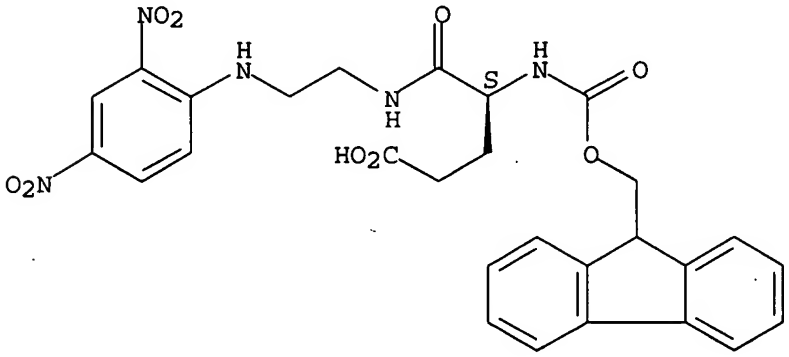
on the utilization of two new internally quenched fluorogenic peptides: Abz-GGFLRRVGQ-EDDnp and Abz-GGFLRRIQ-EDDnp. These peptides contain the fluorescent 2-aminobenzoyl moiety that is quenched in the intact peptide by a 2,4-dinitrophenyl moiety. Cleavage by NRD convertase at the Arg-Arg sequence results in an increase of fluorescence. NRD convertase cleaves these peptides efficiently and with high specificity as observed by both HPLC and fluorescence spectroscopy. The rate of hydrolysis of the fluorogenic substrates is proportional to enzyme concentration, and obeys Michaelis-Menten kinetics. The kinetic parameters for the fluorescent peptides [Km values of .apprx.1.0 μM, and Vmax values of .apprx.1 μM/(min·mg)] are similar to those obtained with peptide hormones as substrates. (c) 1999 Academic Press.

IT **168432-13-1P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(new fluorogenic substrates for N-arginine dibasic convertase)

RN 168432-13-1 CAPLUS

CN Pentanoic acid, 5-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-4-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-5-oxo-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 50 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:126886 CAPLUS
DN 130:196584
TI Preparation of aniline derivatives as calcium channel blockers
IN Hu, Lain-Yen; Rafferty, Michael Francis; Ryder, Todd Robert
PA Warner-Lambert Company, USA
SO PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9907689	A1	19990218	WO 1998-US15907	19980729

W: AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

			US 1997-55251P	P	19970811
			US 1998-82358P	P	19980420
AU 9887627	A1	19990301	AU 1998-87627		19980729
			US 1997-55251P	P	19970811
			US 1998-82358P	P	19980420
			WO 1998-US15907	W	19980729
ZA 9807144	A	19990510	ZA 1998-7144		19980807
			US 1997-55251P	P	19970811
US 6251918	B1	20010626	US 1999-402196		19990929
			US 1997-55251P	P	19970811
			US 1998-82358P	P	19980420
			WO 1998-US15907	W	19980729
US 2001023249	A1	20010920	US 2001-769798		20010125
US 6495715	B2	20021217			
			US 1997-55251P	P	19970811
			US 1998-82358P	P	19980420
			WO 1998-US15907	P	19980729
			US 1999-402196	A3	19990929
US 2003060632	A1	20030327	US 2002-252854		20020923
			WO 1998-US15907	W	19980729
			US 1999-402196	A3	19990929
			US 2001-769798	A3	20010125

OS MARPAT 130:196584

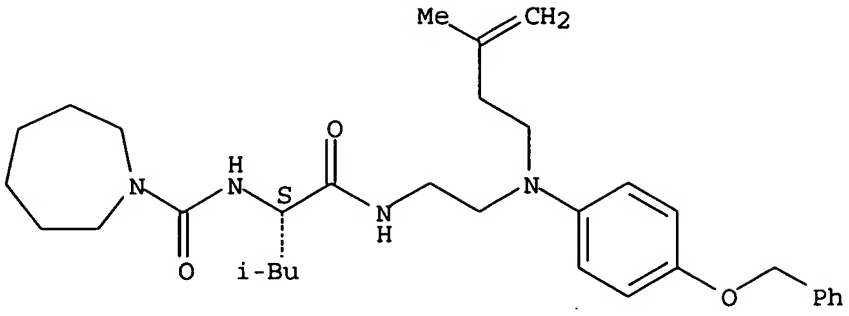
AB The invention provides compds. that block calcium channels. In particular, the invention claims compds. I [Z = CH2 or CO; X = cycloalkylene, (un)substituted heterocycloalkylene, imino or iminoalkylene, certain piperidinediyl or pyrrolidinediyl radicals or their alkylene derivs.; Q = H, (un)substituted aryl, heteroaryl, cycloalkyl, alkyl, heterocycloalkyl; V = O(CH2)n or (CH2)nO, O, (CH2)n, CH:CH, NH(CH2)n or (CH2)nNH or derivs.; R2 = H, alkenyl, cycloalkenyl, (un)substituted Ph, alkyl, cycloalkyl, or Ph; R3 = H, alkyl, alkenyl; R4 = H, cyclo-(CH2)mNCO, alkyl, alkenyl, (un)substituted Ph, heteroaryl, or cycloalkyl; or NR3R4 = 5- to 7-membered ring with an optional addnl. heteroatom; R5 = alkyl, (un)substituted Ph or heteroaryl; m = 1-3; n = 0-3] and their pharmaceutically acceptable salts, esters, amides, and prodrugs. The invention also provides methods of using the compds. to treat stroke, cerebral ischemia, head trauma, or epilepsy, and to pharmaceutical compns. that contain the compds. Over 50 synthetic examples are given, and these plus a large number of addnl. invention compds. are specifically claimed. For instance, N-BOC-α-aminoisobutyric acid underwent amidation with 4-benzyloxyaniline, followed by reduction of the amide with diborane, N-alkenylation with 4-bromo-2-methyl-2-butene, and acidic deprotection to remove BOC, to give intermediate II. In a sep. preparation, H-Leu-OCH2Ph was treated with triphosgene and hexamethylenamine, then deprotected, to give Hac-Leu-OH (III; Hac = hexamethylenaminocarbonyl). Coupling of II with III using HBTU and DIPEA in DMF gave title compound IV. The latter blocked calcium flux through N-type Ca2+ channels in IMR-32 neuronal tumor cells in vitro, with IC50 of 0.26 μM. Selected compds. gave 20-100% protection of mice from tonic seizures in a sound chamber, at doses of 10-30 mg/kg i.v.

IT **220737-37-1P 220737-41-7P 220737-42-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aniline derivs. as calcium channel blockers)

RN 220737-37-1 CAPLUS

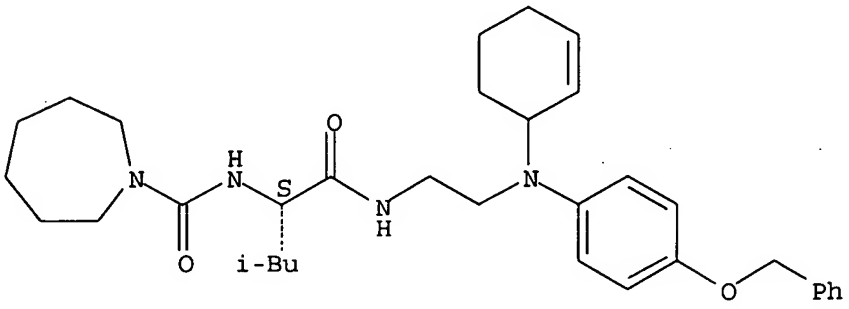
CN 1H-Azepine-1-carboxamide, hexahydro-N-[(1S)-3-methyl-1-[[[2-[(3-methyl-3-butenyl)[4-(phenylmethoxy)phenyl]amino]ethyl]amino]carbonyl]butyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



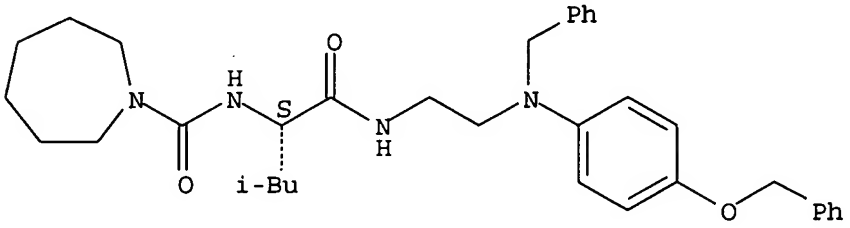
RN 220737-41-7 CAPLUS
CN 1H-Azepine-1-carboxamide, N-[(1S)-1-[[[2-[2-cyclohexen-1-yl[4-(phenylmethoxy)phenyl]amino]ethyl]amino]carbonyl]-3-methylbutyl]hexahydro-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 220737-42-8 CAPLUS
CN 1H-Azepine-1-carboxamide, hexahydro-N-[(1S)-3-methyl-1-[[[2-[[4-(phenylmethoxy)phenyl](phenylmethyl)amino]ethyl]amino]carbonyl]butyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 51 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1999:52655 CAPLUS
DN 130:219752
TI Discrimination of cruzipain, the major cysteine proteinase of Trypanosoma cruzi, and mammalian cathepsins B and L, by a pH-inducible fluorogenic

substrate of trypanosomal cysteine proteinases

AU Serveau, Carole; Lalmanach, Gilles; Hirata, Isaura; Scharfstein, Julio; Juliano, Maria A.; Gauthier, Francis

CS Enzymology and Protein Chemistry Laboratory, University Francois Rabelais, Tours, 37032, Fr.

SO European Journal of Biochemistry (1999), 259(1/2), 275-280
CODEN: EJBCAI; ISSN: 0014-2956

PB Blackwell Science Ltd.

DT Journal

LA English

AB The substrate specificity of cruzipain, the major cysteine proteinase of Trypanosoma cruzi, was investigated using a series of dansyl-peptides based on the putative autoproteolytic sequence of the proteinase (VVG-GP) located at the hinge region between the catalytic domain and the C-terminal extension. Replacing Val with Pro at P2 in this sequence greatly improved the rate of cleavage by cruzipain. Tyr and Val residues are preferred at P3 by all cysteine proteinases whatever their origin, whereas only cruzipain and cathepsin L cleaved substrate with a His at that position. The combination of a Pro at P2 and His at P3 abolished cleavage by cathepsin L, so that only cruzipain was able to cleave the HPGGP peptide at the GG bond. A substrate with intramolecularly quenched fluorescence was raised on this sequence (Abz-HPGGPQ-EDDnp) which was also specifically cleaved by cruzipain (kcat/Km of 157 000 M-1·s-1) and by a homologous proteinase from Trypanosoma congolense. The pH activity profile of cruzipain on Abz-HPGGPQ-EDDnp showed a narrow peak with a maximum at pH 5.5 and no cleavage above pH 6.8, although trypanosomal cysteine proteinases remain active at basic pH. The lack of activity at neutral and basic pH was due to a decrease in kcat, while the Km remained essentially unchanged, demonstrating that the substrate still binds to the enzyme and therefore behaves as an inhibitor. Changing the substrate into an inhibitor depended on the deprotonation of the His residue in the substrate, as deduced from a comparison of the pH activity profile with that of a related, but uncharged, substrate. Abz-HPGGPQ-EDDnp also inhibited mammalian cathepsins B and L but was not cleaved by these proteinases at any pH. The importance of the His residue at P3 for cleavage by cruzipain was confirmed by substituting Lys for His at that position. The resulting peptide was not cleaved by cruzipain in spite of the presence of a pos. charged group at P3, but still interacted with the enzyme. It was concluded that the presence of an imidazolium group at P3 was essential to endow the HPGGPQ sequence with the properties of a cruzipain substrate.

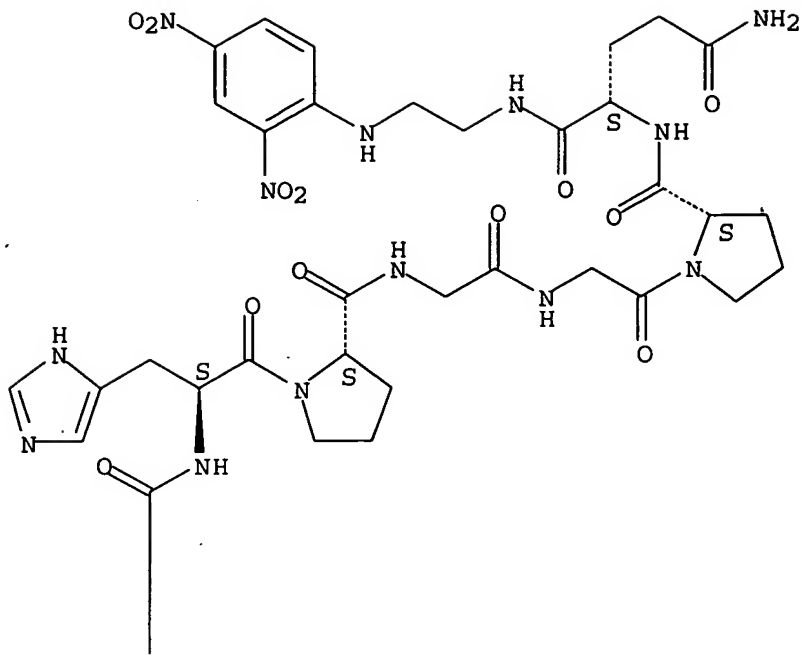
IT **221055-89-6 221055-91-0**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(discrimination of cruzipain and mammalian cathepsins B and L by a pH-inducible fluorogenic substrate of trypanosomal cysteine proteinases)

RN 221055-89-6 CAPLUS

CN L-Glutamamide, N-(2-aminobenzoyl)-L-histidyl-L-prolylglycylglycyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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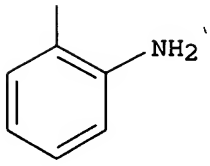
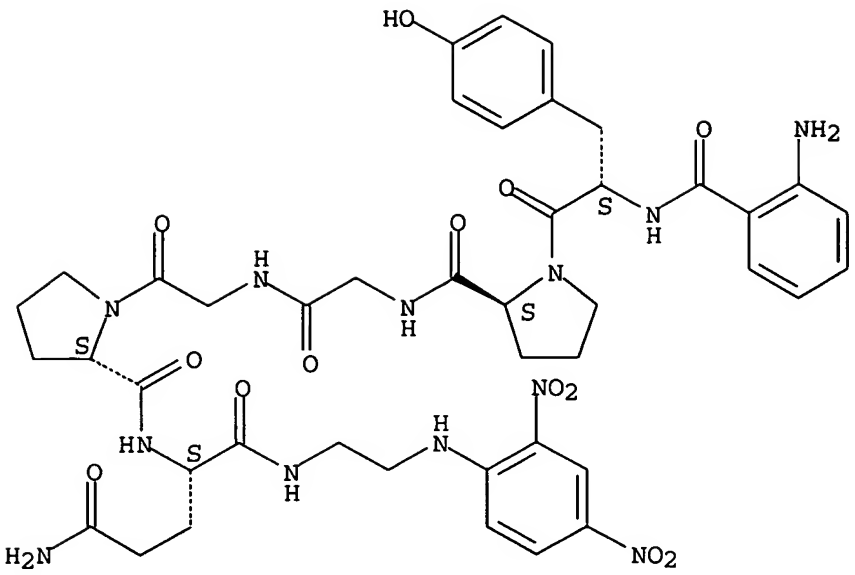


RN 221055-91-0 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-tyrosyl-L-prolylglycylglycyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 52 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:582681 CAPLUS
DN 129:287232
TI Specificity of prohormone convertase 2 on proenkephalin and proenkephalin-related substrates
AU Johanning, Karla; Juliano, Maria A.; Juliano, Luiz; Lazure, Claude; Lamango, Nazarius S.; Steiner, Donald F.; Lindberg, Iris
CS Department of Biochemistry and Molecular Biology, Louisiana State University Medical Center, School of Medicine, New Orleans, LA, 70112, USA
SO Journal of Biological Chemistry (1998), 273(35), 22672-22680
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
AB In the central and peripheral nervous systems, the neuropeptide precursor proenkephalin must be endoproteolytically cleaved by enzymes known as prohormone convertases 1 and 2 (PC1 and PC2) to generate opioid-active enkephalins. In this study, we have investigated the specificity of recombinant mouse PC2 for proenkephalin-related internally quenched (IQ) peptides, for methylcoumarin amide-based fluorogenic peptides, and for recombinant rat proenkephalin. IQ peptides exhibited specificity consts. (kcat/Km) between 9.4 + 104 M-1 S-1 (Abz-Val-Pro-Arg-Met-Glu-Lys-Arg-Tyr-Gly-Gly-Phe-Met-Gln-EDDnp; where Abz is ortho-aminobenzoic acid and EDDnp is N-(2,4-dinitrophenyl)ethylenediamine) and 0.24 + 104 M-1 S-1 (Abz-Tyr-Gly-Gly-Phe-Met-Arg-Arg-Val-Gly-Arg-Pro-Glu-EDDnp), with the peptide B to Met-enk-Arg-Phe cleavage preferred (Met-enk is met-enkephalin). Fluorogenic substrates with P1, P2, and P4 basic amino acids were hydrolyzed with specificity consts. ranging between 2.0 + 103 M-1 S-1 (Ac-Orn-Ser-Lys-Arg-MCA; where MCA is methylcoumarin amide) and 1.8 + 104 M-1 S-1 (<Glu-Arg-Thr-Lys-Arg-MCA; where <Glu is pyroglutamic acid). Substrates containing only a single basic residue were not appreciably hydrolyzed, and substrates lacking a P4 Arg exhibited kcat of less than 0.05 S-1. Substitution of ornithine for Lys at the P4 position did not significantly affect the kcat but increased the Km 2-fold. Data from both sets of fluorogenic substrates supported the

contribution of a P4 Arg to PC2 preference. Anal. of proenkephalin reaction products using immunoblotting and gel permeation chromatog. demonstrated that PC2 can directly cleave proenkephalin and that the generation of small opioid peptides from intermediates is mediated almost entirely by PC2 rather than by PC1. These results are in accord with the anal. of PC2 knock-out brains, in which the amts. of three mature enkephalins were depleted by more than three-quarters.

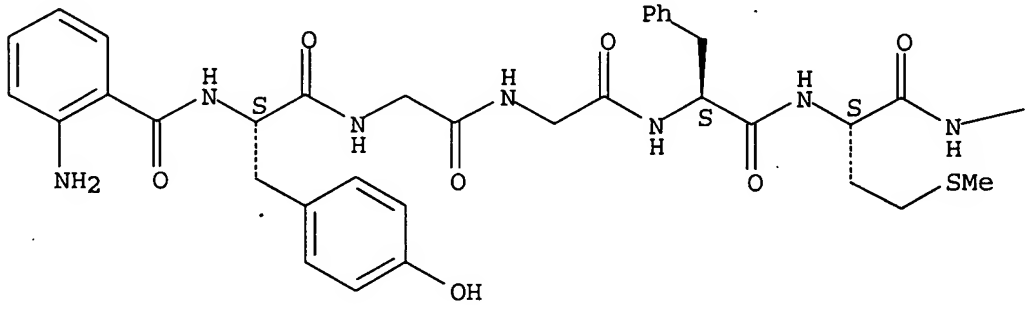
IT **214214-37-6 214214-43-4**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(prohormone convertase 2 specificity for proenkephalin and proenkephalin-related substrates)

RN 214214-37-6 CAPLUS

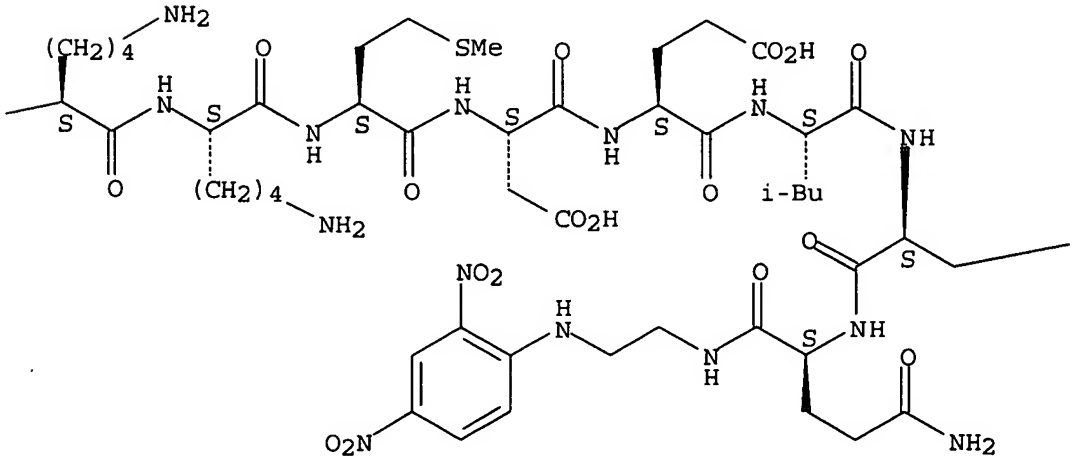
CN L-Glutamamide, N-(2-aminobenzoyl)-L-tyrosylglycylglycyl-L-phenylalanyl-L-methionyl-L-lysyl-L-lysyl-L-methionyl-L-α-aspartyl-L-α-glutamyl-L-leucyl-L-tyrosyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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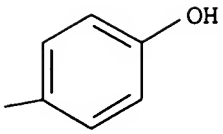
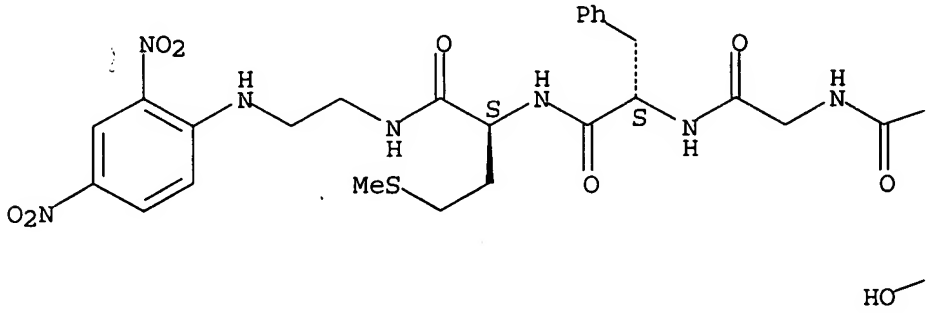


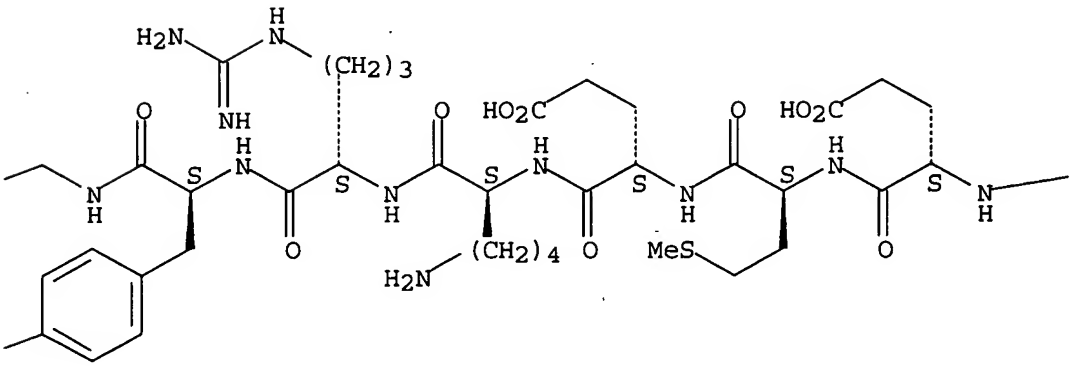
RN 214214-43-4 CAPLUS
CN 5-29-Peptide B (human adrenal medulla), N-(2-aminobenzoyl)-29-[N-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-methioninamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

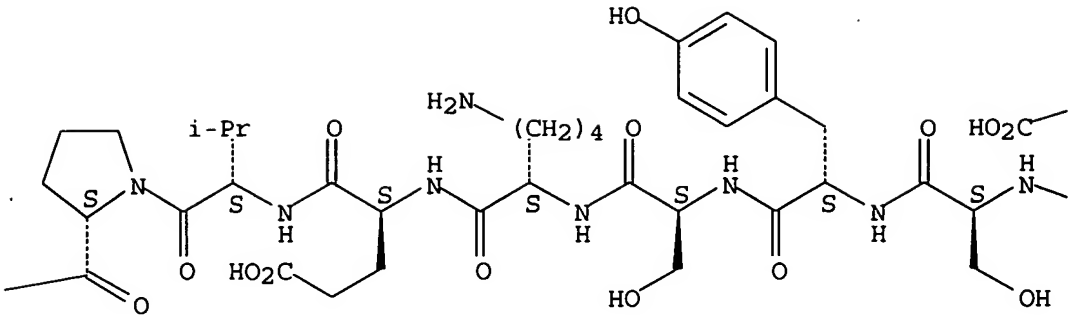
PAGE 1-A



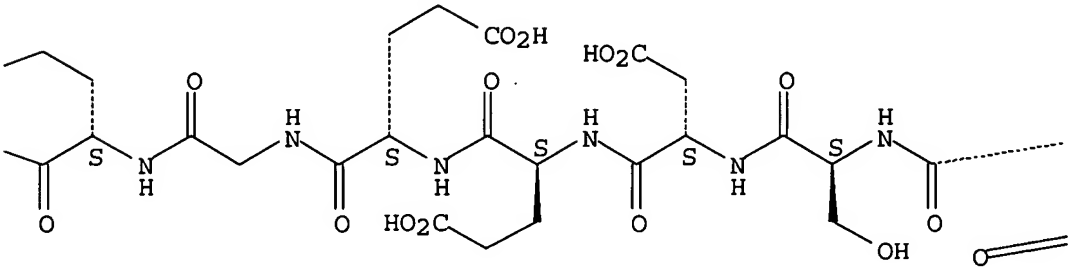
PAGE 1-B



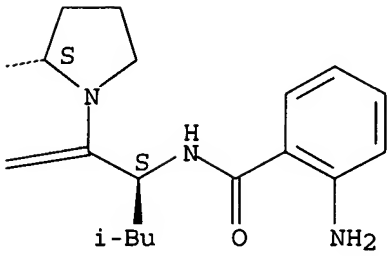
PAGE 1-C



PAGE 1-D



PAGE 1-E



RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 53 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:210882 CAPLUS
DN 128:267961
TI Apoptosis diagnosis in cells by flow cytometry using fluorophore substrates for ICE/Ced3 proteases

IN Debatin, Klaus-Michael; Los, Marek; Hug, Hubert
PA Deutsches Krebsforschungszentrum Stiftung des Offentlichen Rechts, Germany; Ruprecht-Karls-Universitat Heidelberg
SO PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9813517	A1	19980402	WO 1997-DE2204	19970925
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
			DE 1996-19639450 A	19960925
DE 19639450	A1	19980409	DE 1996-19639450	19960925
EP 934430	A1	19990811	EP 1997-912018	19970925
EP 934430	B1	20011212		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
			DE 1996-19639450 A	19960925
			WO 1997-DE2204 W	19970925
AT 210733	E	20011215	AT 1997-912018	19970925
			DE 1996-19639450 A	19960925
			WO 1997-DE2204 W	19970925
ES 2169851	T3	20020716	ES 1997-912018	19970925
			DE 1996-19639450 A	19960925

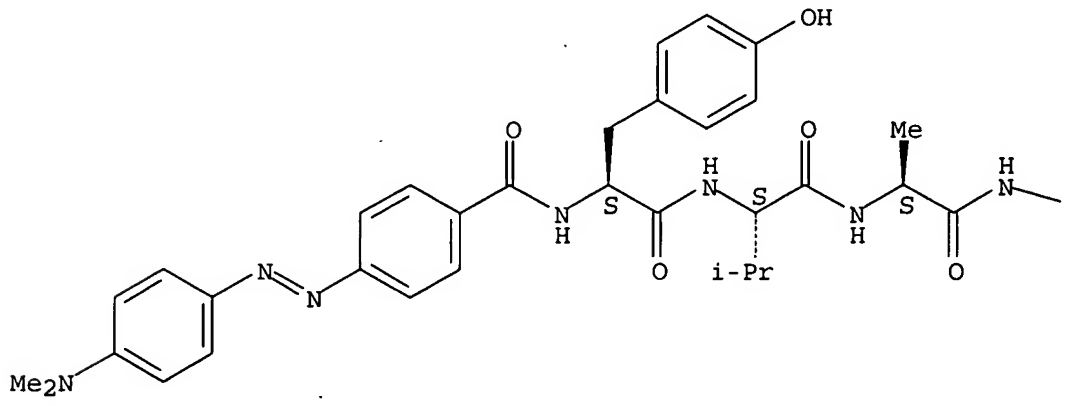
AB The invention concerns a method to diagnose apoptosis in cells by incubating the cells with a fluorophore substrate for ICE/Ced3 proteases and monitoring the enzyme reaction by imaging methods, e.g flow cytometry. The substrates are DABCYL-YVADAPK-EDANS, DABCYL-DEVDAPK-EDANS, DEVD-NMA or Rhodamine 110 derivs. with substituents such as amino acids or short peptides that are Caspase substrates. The invention also relates to a kit to carry out this method.

IT **205651-31-6 205651-32-7**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (apoptosis diagnosis in cells by flow cytometry using fluorophore substrates for ICE/Ced3 proteases)

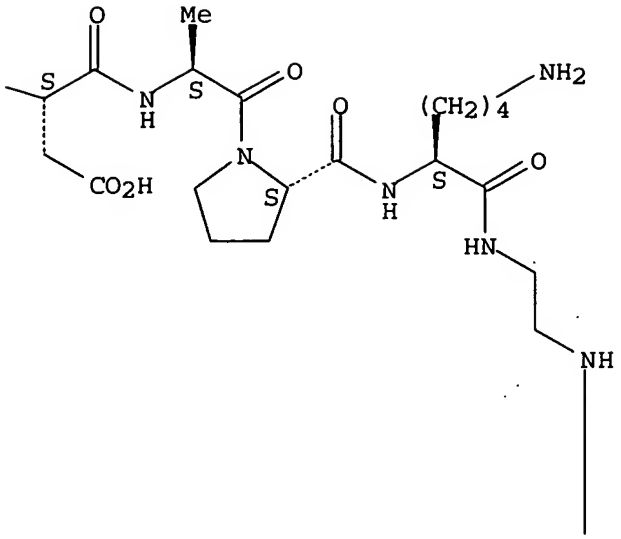
RN 205651-31-6 CAPLUS
CN L-Lysinamide, N-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-tyrosyl-L-valyl-L-alanyl-L-α-aspartyl-L-alanyl-L-prolyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

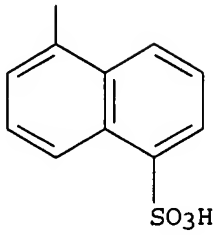
PAGE 1-A



PAGE 1-B



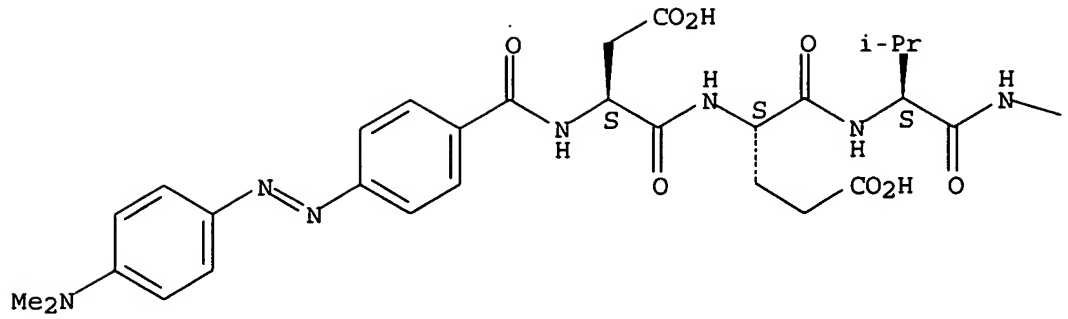
PAGE 2-B



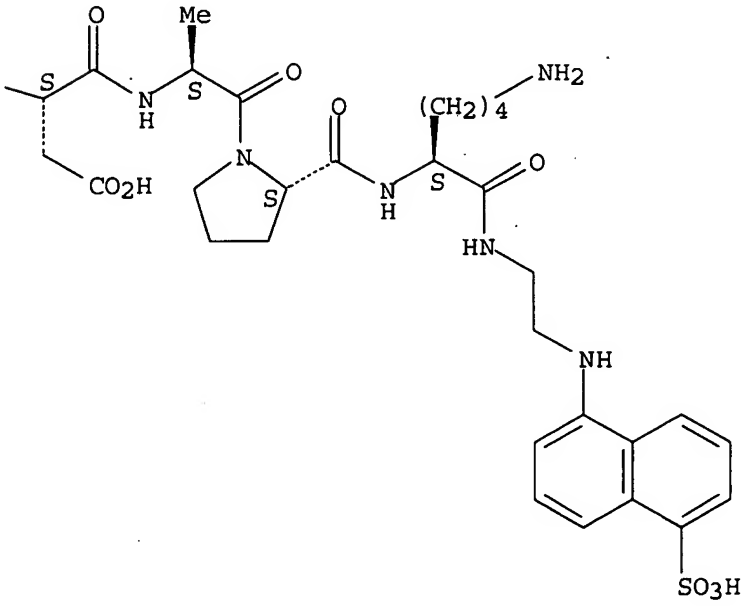
RN 205651-32-7 CAPLUS
CN L-Lysinamide, N-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-α-aspartyl-L-α-glutamyl-L-valyl-L-α-aspartyl-L-alanyl-L-prolyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 54 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1998:24680 CAPLUS
DN 128:214743
TI Characterization of an HCV NS3/NS4A proteinase fusion protein expressed in E. coli using synthetic peptide substrates
AU Wilkinson, Trevor C. I.; Bunyard, Peter R.; Quirk, Kathleen; Wilkinson, Claire S.
CS Roche Discovery Welwyn, Welwyn Garden City, AL7 3AY, UK
SO Biochemical Society Transactions (1997), 25(4), S624
CODEN: BCSTB5; ISSN: 0300-5127
PB Portland Press Ltd.
DT Journal
LA English
AB Hepatitis C virus (HCV) nonstructural proteins are arranged in the sequence NS2-NS3-NS4A-NS4B-NS5A-NS5B. To develop the in vitro assays

required to characterize the biochem. properties of the HCV NS3 proteinase and allow the evaluation of inhibitors, the authors expressed the proteinase in Escherichia coli as a fusion protein with NS4A. The recombinant protein consisted of residues 1007-1218 of the HCV polyprotein (which encodes 20 amino acid residues of NS2 in addition to the NS3 proteinase domain) fused at its C-terminus to the 54 amino acid residue NS4A protein via a linker of the sequence CM(G)12SM and at its N-terminus to maltose-binding protein (MBP). This fusion protein was referred to as MBP-NS3/4A. MBP-NS3/4A was expressed as a soluble protein in E. coli and was isolated from cell lysates by amylose affinity chromatog. The yield of affinity purified protein was 2 mg per L of E. Coli. Enzyme activity was demonstrated by incubating MBP-NS3/4A with a dodecapeptide substrate corresponding to the NS4A-NS4B cleavage site (Succ-DEMEECASHLPY-amide, Pep4A/B) followed by reverse phase HPLC anal. of the sample. The authors also synthesized a dodecapeptide substrate corresponding to the NS5A-B cleavage site (Succ-EDVVPCSMSYTW-amide, Pep5A/B) to allow a comparison of the kinetic parameters for cleavage at the NS4A-B and NS5A-B sites. Cleavage efficiency, expressed as kcat/Km, was found to be 23800 M-1s-1 for Pep5A/B and 300 M-1s-1 for Pep4A/B. The authors also designed an internally quenched fluorogenic substrate (DABCYL-DEMEECASHEEDANS, Pep4A/B-F) based on the NS4A-B cleavage site. Cleavage of this substrate between the C-A peptide bond would liberate the ASHE-EDANS fragment from the proximity quenching effect of the DABCYL group, resulting in an increase in fluorescence. Incubation of MBP-NS3/4A with Pep4A/B-F resulted in efficient cleavage of the fluorogenic substrate, resulting in an increase in fluorescence intensity, which could be monitored continuously. In summary, the data demonstrate that the MBP-NS3/4A fusion protein may be expressed as an active enzyme in E. coli and is capable of cleaving a number of peptide substrates. The fluorogenic assay allows continuous monitoring of enzyme activity, and the assay may be used in a 96-well format suitable for inhibitor screening.

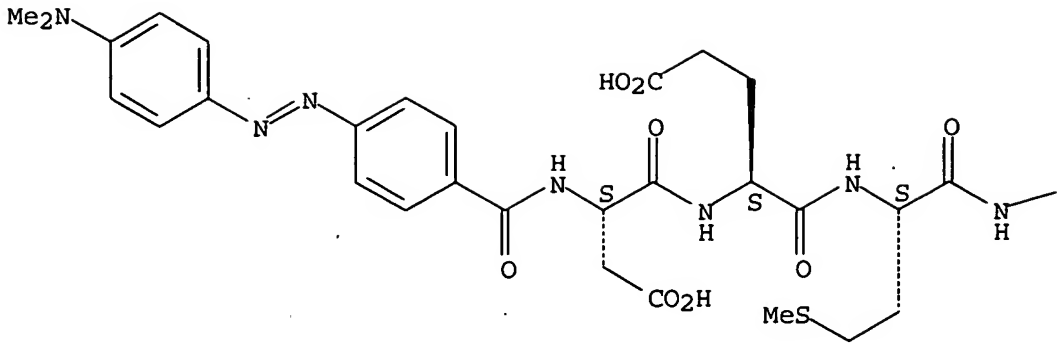
IT **204276-23-3P**
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(expression in Escherichia coli of hepatitis C virus NS3/NS4A proteinase fusion protein and characterization using synthetic peptide substrates)

RN 204276-23-3 CAPLUS

CN L-α-Glutamine, N-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-α-aspartyl-L-α-glutamyl-L-methionyl-L-α-glutamyl-L-α-glutamyl-L-cysteinyl-L-alanyl-L-seryl-L-histidyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



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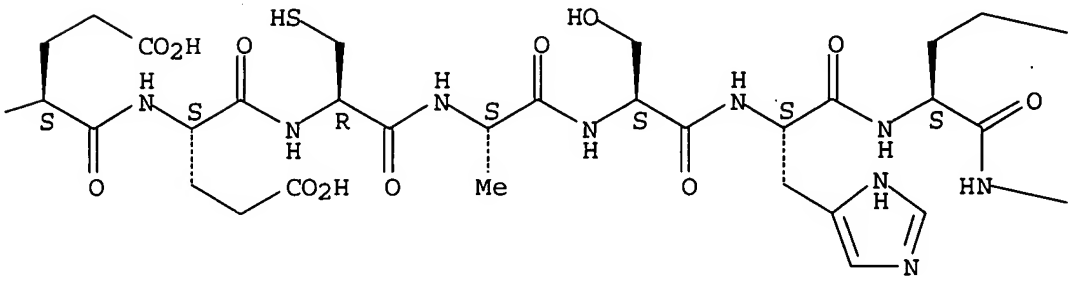

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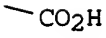
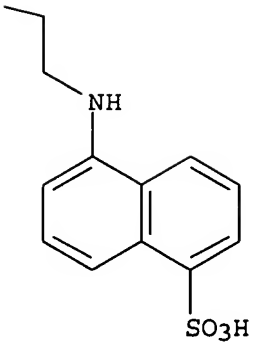


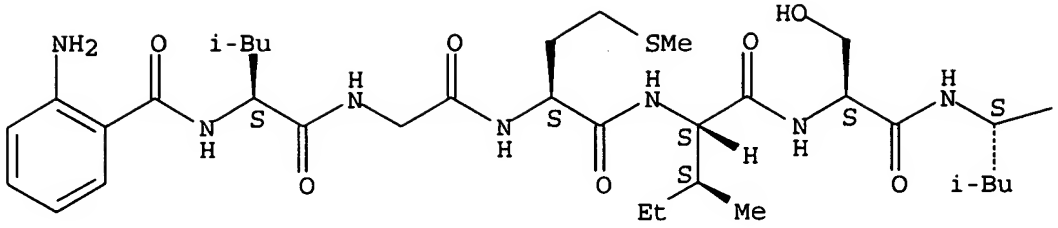


RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 55 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:751394 CAPLUS
DN 128:99209
TI Serpin-derived peptide substrates for investigating the substrate specificity of human tissue kallikreins hK1 and hK2
AU Bourgeois, Luc; Brillard-Bourdet, Michele; Deperthes, David; Juliano, Maria A.; Juliano, Luiz; Tremblay, Roland R.; Dube, Jean Y.; Gauthier, Francis
CS Laboratory of Enzymology and Protein Chemistry, CNRS EP 117, University Francois Rabelais, Tours, 37032, Fr.
SO Journal of Biological Chemistry (1997), 272(47), 29590-29595
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
AB The third human tissue kallikrein to be identified, hK2, could be an alternate or complementary marker to kallikrein hK3 (prostate-specific antigen) for prostate diseases. Most of the hK2 in seminal plasma forms an inactive complex with protein C inhibitor (PCI), a serpin secreted by seminal vesicles. As serpin inhibitors behave as suicide substrates that are cleaved early in the interaction with their target enzyme, and kallikreins have different sensitivities to serpin inhibitors, we prepared a series of substrates with intramolecularly quenched fluorescence based on the sequences of the serpin reactive loops. They were used to compare the substrate specificities of hK1 and hK2, which both have trypsin-like specificity, and thus differ from chymotrypsin-like hK3. The serpin-derived peptides behaved as kallikrein substrates whose sensitivities reflected the specificity of the parent inhibitory proteins. Substrates derived from PCI were the most sensitive for both hK1 and hK2 with specificity consts. of about 107 M-1 s-1. Those derived from antithrombin III and α2-antiplasmin were more specific for hK2 while a kallistatin-derived substrate was specifically cleaved by hK1. The hK1 and hK2 substrates of greater specificity were obtained using chimeric peptides based on the sequence of serpin reactive loops. The main difference between specificities of hK1 and hK2 arise because hK2 can accommodate pos. charged as well as small residues at P2 and requires an arginyl residue at P1. Thus, unlike hK1, hK2 does not cleave kininogen-derived substrates overlapping the region of N-terminal insertion of bradykinin in human kininogens.
IT **198216-20-5**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(serpin-derived peptide substrates for investigating the substrate specificity of human tissue kallikreins hK1 and hK2)
RN 198216-20-5 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-leucylglycyl-L-methionyl-L-isoleucyl-L-seryl-L-leucyl-L-methionyl-L-lysyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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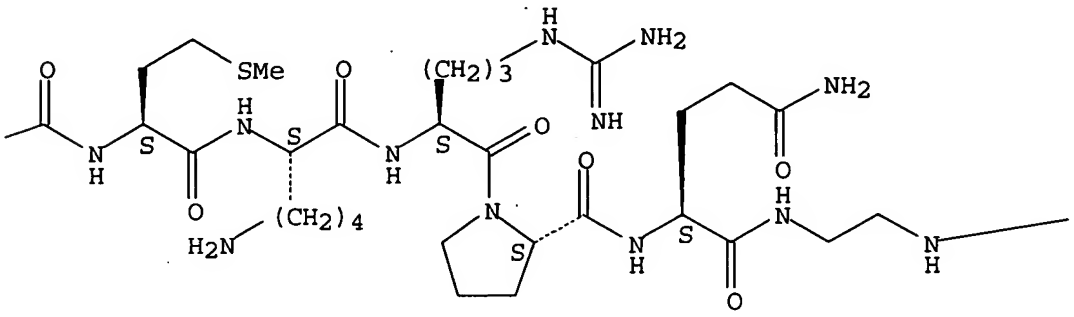

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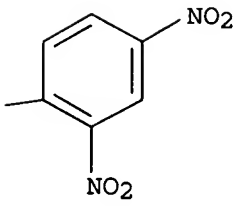


RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 56 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:665528 CAPLUS
DN 127:343239
TI Kininogenase activity by the major cysteinyl proteinase (cruzipain) from Trypanosoma cruzi
AU Nery, Elaine Del; Juliano, Maria A.; Lima, Ana Paula C. A.; Scharfstein, Julio; Juliano, Luiz
CS Dep. Biophysics, Universidade Federal Sao Paulo, Sao Paulo, 04044-020, Brazil
SO Journal of Biological Chemistry (1997), 272(41), 25713-25718
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal

LA English

AB The major isoform of Trypanosoma cruzi cysteinyl proteinase (cruzipain) has generated Lys-bradykinin (Lys-BK or kallidin), a proinflammatory peptide, by proteolysis of kininogen. The releasing of this peptide was demonstrated by mass spectrometry, RIA, and ileum contractile responses. The kinin-releasing activity was immunoabsorbed selectively by monoclonal antibodies to the characteristic COOH-terminal domain of cruzipain. To determine the hydrolysis steps that account for the kininogenase activity of cruzipain, we synthesized a fluorogenic peptide (o-aminobenzoyl-Leu-Gly-Met-Ile-Ser-Leu-Met-Lys-Arg-Pro-Pro-Gly-Phe-Ser-Pro-Phe-Arg389-Ser390-Ser-Arg-Ile-NH2) based on the sequence Leu373 to Ile393 of the human high mol. weight kininogen. The hydrolysis products from this peptide were isolated by high performance liquid chromatog., and Lys-BK was characterized as the major released kinin by mass spectrometry. Intramolecularly quenched fluorogenic peptides spanning the Met379-Lys380 and Arg389 bradykinin-flanking sequences were then used to assess the substrate specificity requirements of the parasite-derived protease compared with two COOH-terminal truncated recombinant isoforms (cruzain and cruzipain 2). In contrast to the high catalytic efficiency of parasite-derived cruzipain, the recombinant proteinases cleaved the bradykinin-flanking sites at markedly different rates. In addition, we also demonstrated that cruzipain activates plasmatic prekallikrein, which would be a second and indirect way of the parasite protease to release bradykinin.

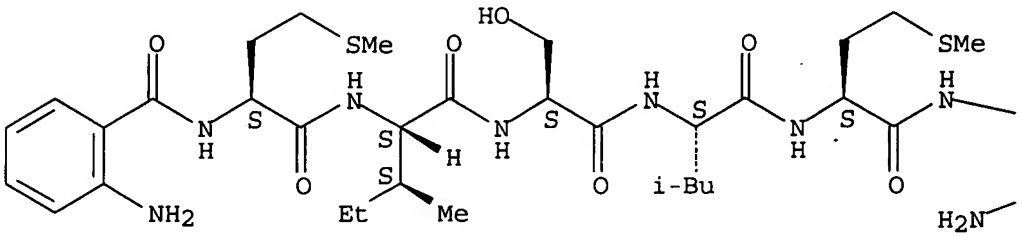
IT **162851-86-7 198216-20-5**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(kininogenase activity by major cysteinyl proteinase (Cruzipain) from Trypanosoma cruzi)

RN 162851-86-7 CAPLUS

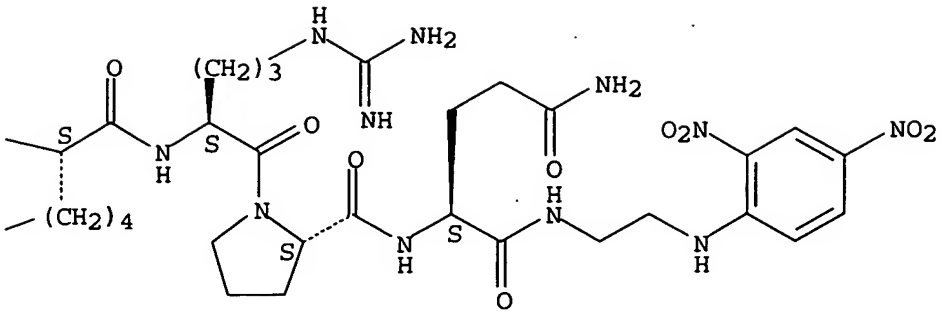
CN L-Glutamamide, N-(2-aminobenzoyl)-L-methionyl-L-isoleucyl-L-seryl-L-leucyl-L-methionyl-L-lysyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



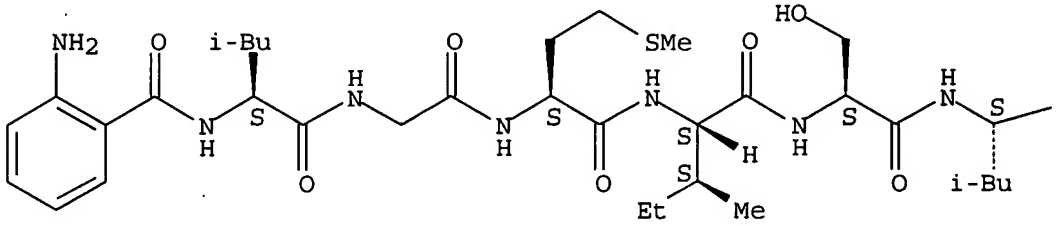
PAGE 1-B



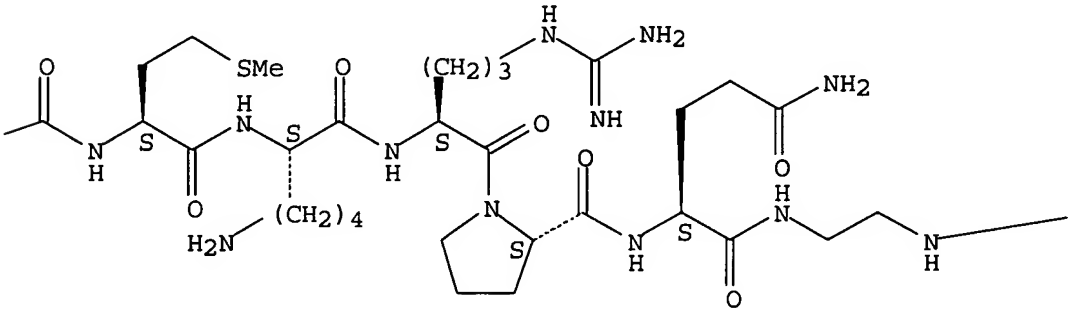
RN 198216-20-5 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-leucylglycyl-L-methionyl-L-isoleucyl-L-seryl-L-leucyl-L-methionyl-L-lysyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

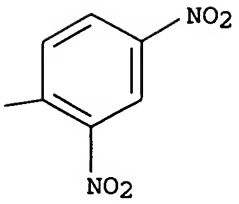
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B





RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 57 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:544502 CAPLUS
DN 127:244667
TI Kininogen-derived fluorogenic substrates for investigating the vasoactive properties of rat tissue kallikreins. Identification of a T-kinin-releasing rat kallikrein
AU El Moujahed, Abderrahman; Brillard-Bourdet, Michele; Juliano, Maria A.; Moreau, Thierry; Chagas, Jair R.; Gutman, Ninette; Prado, Eline S.; Gauthier, Francis
CS Laboratory of Enzymology and Protein Chemistry, CNRS EP 117, University Francois Rabelais, Tours, F-37032, Fr.
SO European Journal of Biochemistry (1997), 247(2), 652-658
CODEN: EJBCAI; ISSN: 0014-2956
PB Springer
DT Journal
LA English
AB Peptide substrates with intramolecularly quenched fluorescence that reproduce the rat kininogen sequences at both ends of the bradykinin moiety were synthesized and used to investigate the kinin-releasing properties of five rat tissue kallikreins (rK1, rK2, rK7, rK9, rK10). Substrates derived from rat H- and L-kininogen were cleaved best by rK1, especially that including the N-terminal insertion site of bradykinin, Abz-TSVIRRPQ-EDDnp(Abz = O-aminobenzoyl, EDDnp = ethylenediamine 2,4-dinitrophenyl), which was cleaved at the R-R bond with a kcat/Km of 12400 mM-1 s-1. Replacement of the P2' residue Pro by Val in Abz-TSVIRRPQ-EDDnp gave a far less specific substrate that was rapidly hydrolyzed by all five rat kallikreins and human kallikrein hK1. Peptidyl-N-Me coumarylamide substrates, which lack prime residues, also had low specificities. The importance of the P2' residue for rK1 specificity was further demonstrated using a human-kininogen-derived substrate that included the N-terminal insertion site of bradykinin (Abz-LMKRP-EDDnp). This was cleaved at the M-K bond by hK1 (kallidin-releasing site), but at the K-R bond (bradykinin-releasing site) by rK1. Competition expts. with Abz-TSVIRRPQ-EDDnp, which is resistant to most kallikreins, and Abz-TSVIRRVQ-EDDnp, a general kallikrein substrate, demonstrated that the former competitively inhibited hydrolysis by rK9 and hK1, with Ki values similar to the Km values for the substrate. Thus Pro in P2' does not prevent the peptide binding to the enzyme active site, but impairs cleavage of the scissile bond. The T-kininogen-derived substrate with the T-kinin C-terminal sequence (Abz-FRLVR-EDDnp) was cleaved by rK10 (Kcat/Km = 2310 mM-1 s-1) and less rapidly by rK1, rK7 and hK1, at the R-L bond, while that corresponding to the N-terminal (Abz-ALDMMISRP-EDDnp) of T-kinin was resistant to all five kallikreins used, suggesting that none

has T-kininogenase activity. But this substrate was hydrolyzed by a semi-purified sample of submandibular gland extract Another kallikrein, identified as kallikrein rK3, was isolated from this fraction and shown to hydrolyze Abz-ALDMMISRP-EDDnp; rK3 also specifically released T-kinin from purified T1/T2-kininogen after HPLC fractionation. Injection of purified rK3 and of Abz-ALDMMISRP-EDDnp-cleaving fractions into the circulation of anesthetized rats caused transient falls in blood pressure, as did purified rK1 but none of the other purified rat or human kallikreins. This effect occurred via activation of the kinin system since it was blocked by Hoe140, a kinin receptor antagonist.

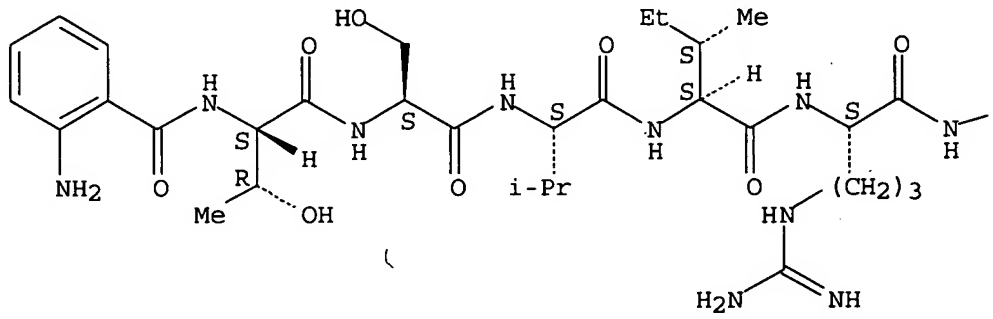
IT **195812-27-2 195812-29-4 195812-30-7**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(kininogen-derived fluorogenic substrates for investigating the vasoactive properties of rat tissue kallikreins)

RN 195812-27-2 CAPLUS

CN L-Glutamamide, N-(2-aminobenzoyl)-L-threonyl-L-seryl-L-valyl-L-isoleucyl-L-arginyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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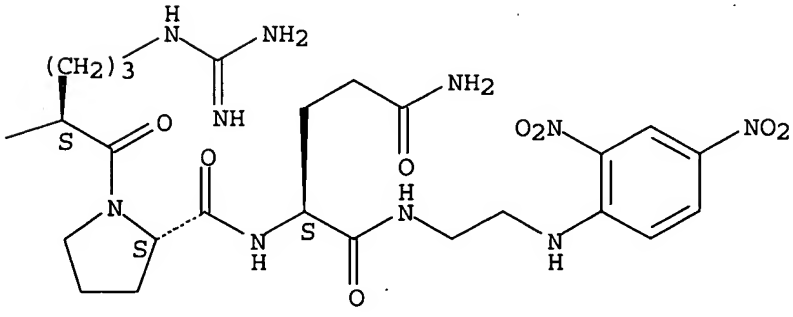
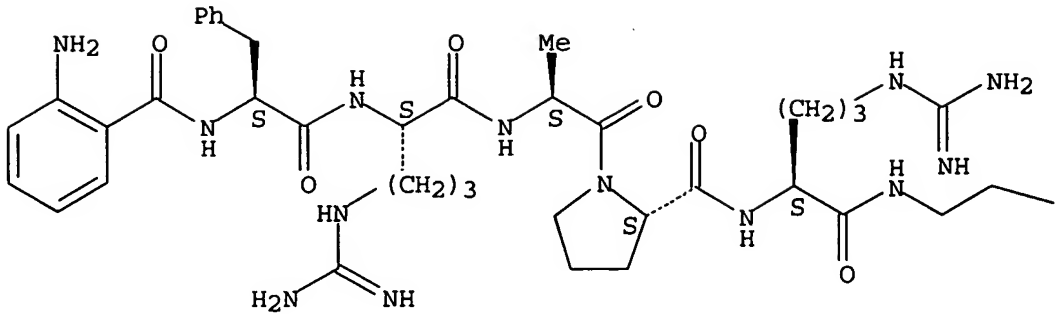


RN 195812-29-4 CAPLUS

CN L-Argininamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-arginyl-L-alanyl-L-prolyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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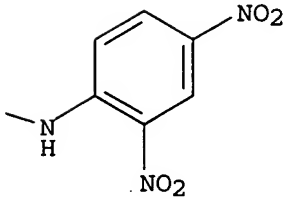
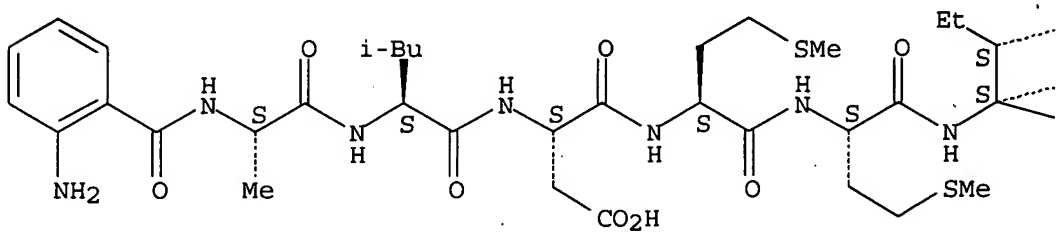
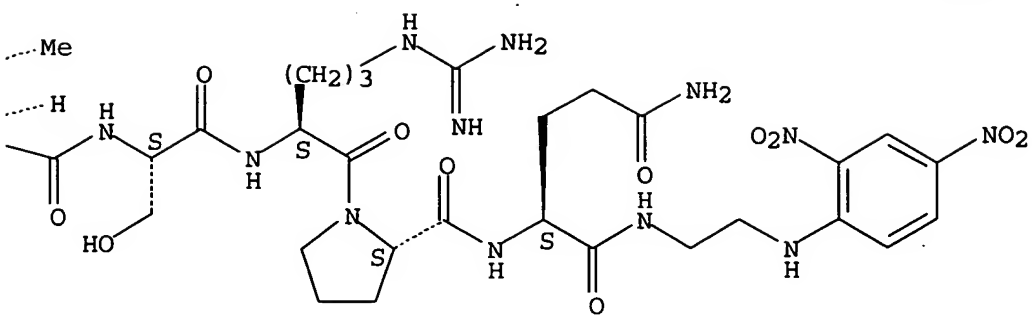


RN 195812-30-7 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-alanyl-L-leucyl-L-α-aspartyl-L-methionyl-L-methionyl-L-isoleucyl-L-seryl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





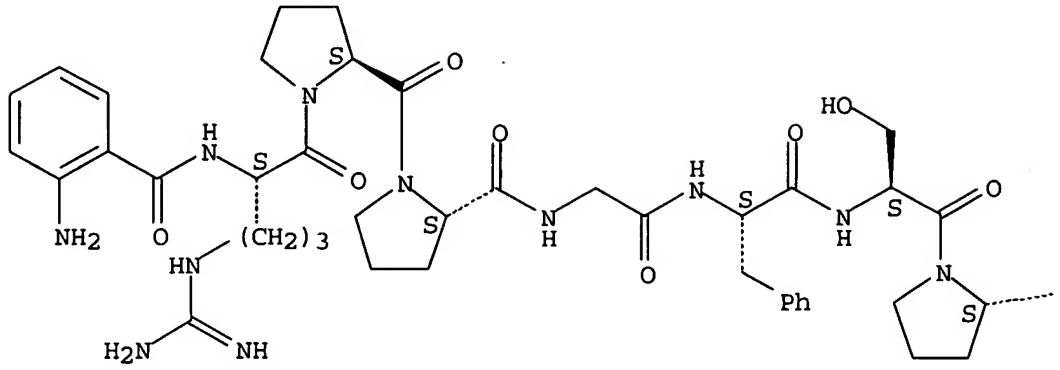
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 58 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:395177 CAPLUS
DN 127:118888
TI Structural features that make oligopeptides susceptible substrates for hydrolysis by recombinant thimet oligopeptidase
AU Camargo, Antonio C. M.; Gomes, Marcelo D.; Reichl, Antonia P.; Ferro, Emer S.; Jacchieri, Saul; Hirata, Isaura Y.; Julianos, Luiz
CS Lab. of Biochemistry and Biophysics of the Inst. Butantan, Sao Paulo, 05503-900, Brazil
SO Biochemical Journal (1997), 324(2), 517-522
CODEN: BIJOAK; ISSN: 0264-6021
PB Portland Press
DT Journal
LA English
AB A systematic anal. of the peptide sequences and lengths of several homologs of bioactive peptides and of a number of quenched-fluorescence (qf) opioid- and bradykinin-related peptides was performed to determine the main features leading the oligopeptides to hydrolysis by the recombinant rat testis thimet oligopeptidase (EC 3.4.24.15). The results indicate that a min. substrate length of 6 amino acids is required and that among the oligopeptides 6-13 amino acid residues long, their susceptibility as substrates is highly variable. Thimet oligopeptidase was able to hydrolyze, with similar catalytic efficiency, peptide bonds having hydrophobic or hydrophilic amino acids as well as proline in the P1 position of peptides, ranging from a min. of 6 to a maximum of .apprx.13 amino acid residues. An intriguing observation was the shift of the cleavage site, at a Leu-Arg bond in qf dynorphin-(2-8) [qf-Dyn2-8; Abz-GGFLRRV-EDDnp, where Abz stands for o-aminobenzoyl and EDDnp for N-(2,4-dinitrophenyl) ethylenediamine], to Arg-Arg in qf-Dyn2-8Q, in which Gln was substituted for Val at its C-terminus. Similarly, a cleavage site displacement was also observed with the hydrolysis of the internally quenched-fluorescence bradykinin analogs containing Gln at the C-terminal position, namely Abz-RPPGFSPFR-EDDnp and Abz-GFSPFR-EDDnp are cleaved at the Phe-Ser bond, but Abz-RPPGFSPFRQ-EDDnp and Abz-GFSPFRQ-EDDnp are cleaved at the Pro-Phe bond.
IT **192871-58-2 192871-59-3 192871-60-6**
192871-70-8 192871-71-9
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(structural features that make oligopeptides susceptible substrates for hydrolysis by recombinant thimet oligopeptidase)
RN 192871-58-2 CAPLUS
CN Bradykinin, N2-(2-aminobenzoyl)-9-[N-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-

argininamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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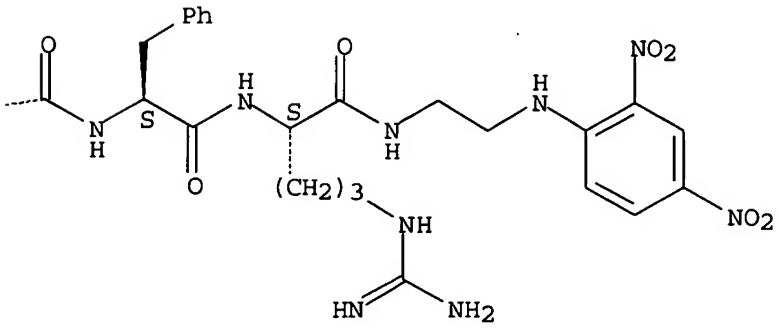
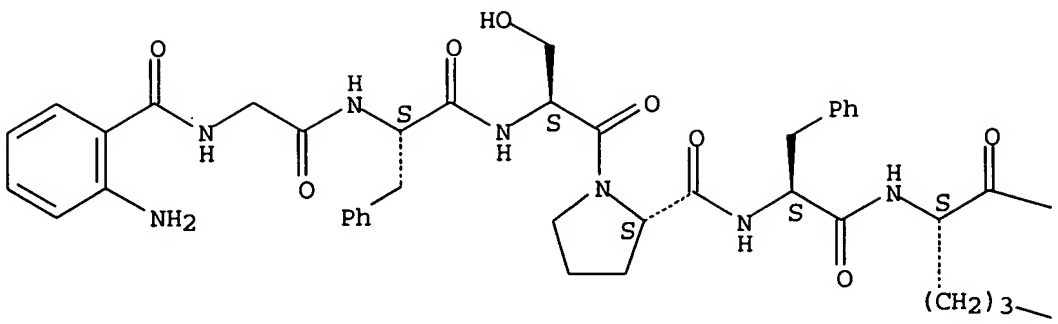


RN 192871-59-3 CAPLUS
CN 2-8-Converstatin, 2-(2-aminobenzoic acid)-8-[N-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-argininamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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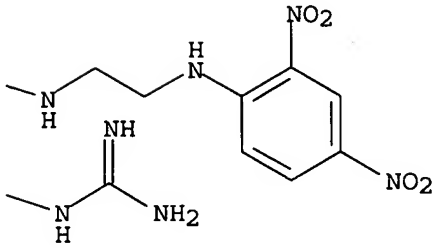
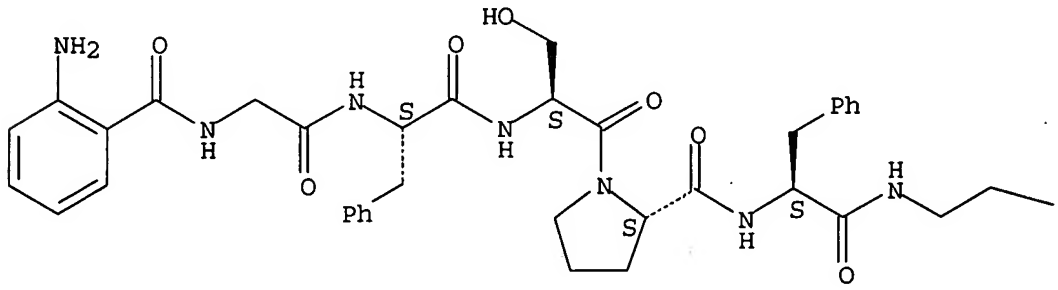


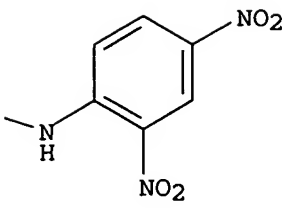
RN 192871-60-6 CAPLUS
CN 2-7-Converstatin, 2-(2-aminobenzoic acid)-7-[N-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-phenylalaninamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



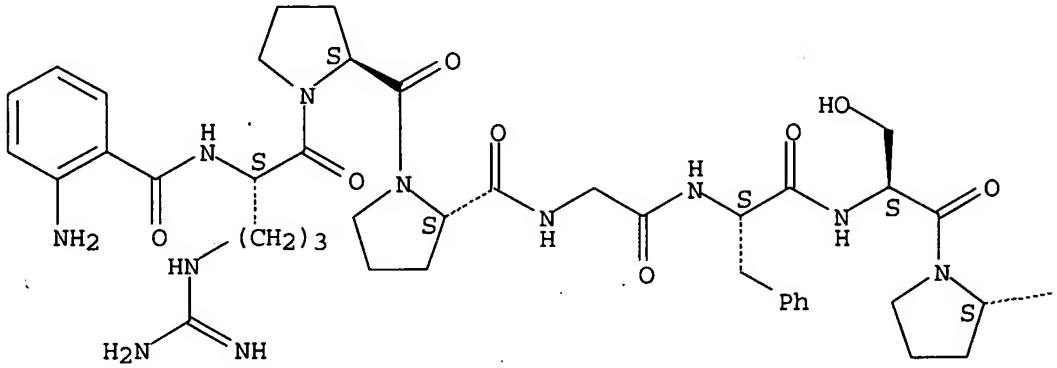
PAGE 1-B



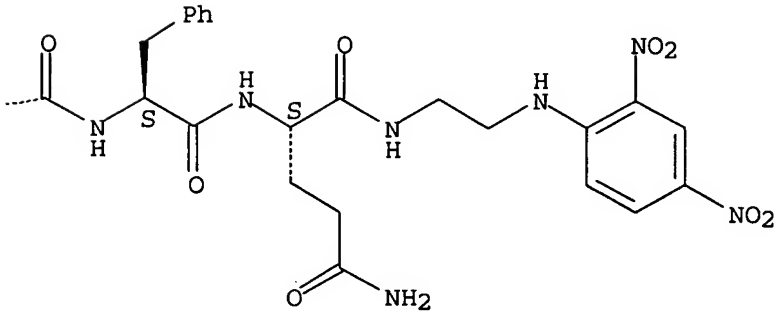
RN 192871-70-8 CAPLUS
CN Bradykinin, N2-(2-aminobenzoyl)-9-[N1-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-glutamamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



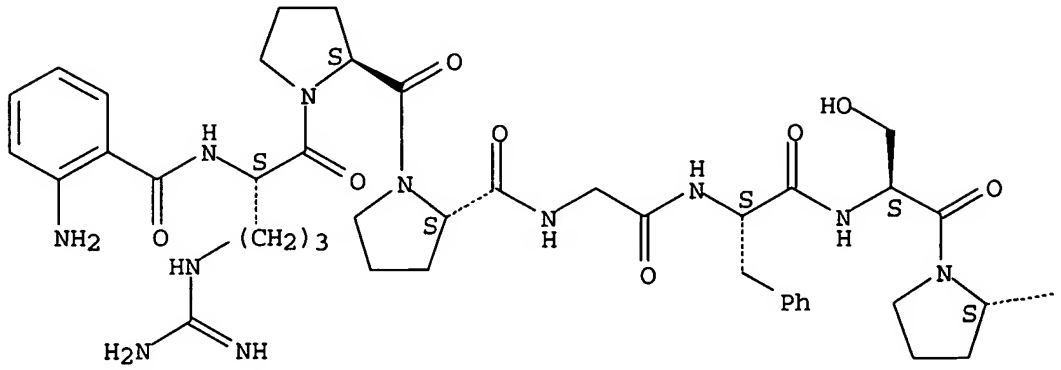
PAGE 1-B



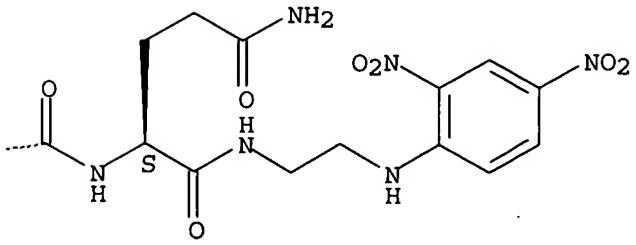
RN 192871-71-9 CAPLUS
CN 1-8-Bradykinin, N2-(2-aminobenzoyl)-8-[N1-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-glutamamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 59 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:248791 CAPLUS
DN 126:327291
TI Design of kallidin-releasing tissue kallikrein inhibitors based on the specificities of the enzyme's binding subsites
AU Portaro, Fernanda C. V.; Cezari, Maria H. S.; Juliano, Maria A.; Juliano, Luiz; Walmsley, Adrian R.; Prado, Eline S.
CS Department Biophysics, Universidade Federal Sao Paulo-Escola Paulista Medicina, Sao Paulo, 04044-020, Brazil
SO Biochemical Journal (1997), 323(1), 161-171
CODEN: BIJOAK; ISSN: 0264-6021
PB Portland Press
DT Journal
LA English
AB Tissue kallikrein inhibitors were derived by selectively replacing

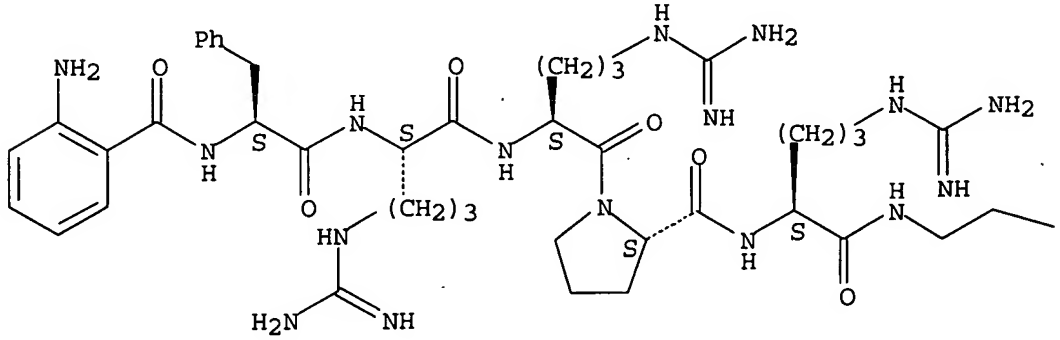
residues in Nα-substituted arginine- or phenylalanine-pNA (where pNA is p-nitroanilide), and in peptide substrates for these enzymes. Phenylacetyl-Arg-pNA was an efficient inhibitor of human tissue kallikrein (Ki 0.4 μM) and was neither a substrate nor an inhibitor of plasma kallikrein. The peptide inhibitors having phenylalanine as the P1 residue behaved as specific inhibitors for kallidin-releasing tissue kallikreins, whereas plasma kallikrein showed high affinity for inhibitors containing (p-nitro)phenylalanine at the same position. The Ki value of the most potent inhibitor developed, Abz-Phe-Arg-Arg-Pro-Arg-EDDnp [where Abz is o-aminobenzoyl and EDDnp is N-(2,4-dinitrophenyl)-ethylenediamine], was 0.08 μM for human tissue kallikrein. Progress curve analyses of the inhibition of human tissue kallikrein by benzoyl-Arg-pNA and phenylacetyl-Phe-Ser-Arg-EDDnp indicated a single-step mechanism for reversible formation of the enzyme-inhibitor complex.

IT **189621-46-3 189621-51-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(design of kallidin-releasing tissue kallikrein inhibitors based on the specificities of the enzyme's binding subsites)

RN 189621-46-3 CAPLUS
CN L-Argininamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-arginyl-L-arginyl-L-prolyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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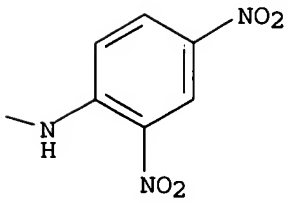
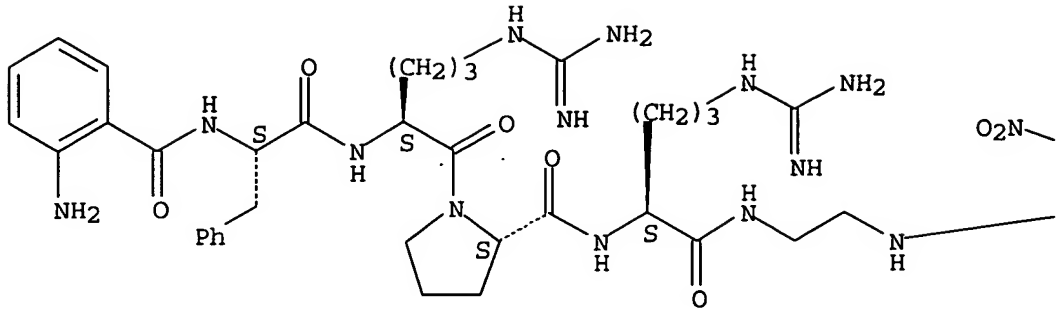


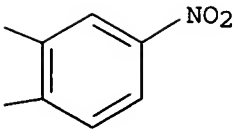
RN 189621-51-0 CAPLUS
CN L-Argininamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-arginyl-L-prolyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 60 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:994533 CAPLUS
DN 124:56723
TI Preparation of N-(aryl- and alkoxycarbonyl)valineamides and analogs as agrochemical fungicides
IN Wagner, Oliver; Eicken, Karl; Ammermann, Eberhard; Lorenz, Gisela; Wetterich, Frank
PA Germany
SO PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI WO 9523786	A1	19950908	WO 1995-EP606		19950220
W: AU, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, MX, NO, NZ, PL, RO, RU, UA, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
			DE 1994-4407022	A	19940303
			DE 1994-4438738	A	19941029
DE 4407022	A1	19950907	DE 1994-4407022		19940303
DE 4438738	A1	19960502	DE 1994-4438738		19941029
AU 9517582	A1	19950918	AU 1995-17582		19950220
			DE 1994-4407022	A	19940303
			DE 1994-4438738	A	19941029
			WO 1995-EP606	W	19950220

PATENT FAMILY INFORMATION:

FAN 1995:994161

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4407022	A1	19950907	DE 1994-4407022	19940303
	WO 9523786	A1	19950908	WO 1995-EP606	19950220
	W: AU, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, MX, NO, NZ, PL, RO, RU, UA, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
				DE 1994-4407022 A	19940303
				DE 1994-4438738 A	19941029
	AU 9517582	A1	19950918	AU 1995-17582	19950220
				DE 1994-4407022 A	19940303
				DE 1994-4438738 A	19941029
				WO 1995-EP606 W	19950220
	ZA 9501726	A	19960902	ZA 1995-1726	19950302
				DE 1994-4407022 A	19940303

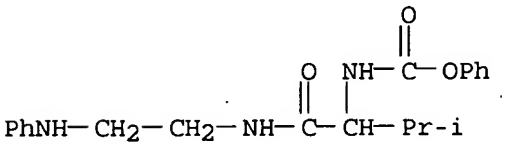
OS MARPAT 124:56723

AB R1O2CNR2CR3R4CONR5(CR2)mZZ1R6 [I; R = H, (un)substituted (cyclo)alk(en)yl; R1 = (cyclo)alk(en)yl, heterocyclyl, (hetero)aryl, etc.; R2,R5 = H, (halo)(cyclo)alkyl; R3 = (un)substituted (cyclo)alkyl; R4 = H, (un)substituted (cyclo)alkyl; R3R4 = atoms to form a ring; R6 = (un)substituted (hetero)aryl; Z = CR7R8, cycloalk(en)ylene (m = 0); R7,R8 = H, (un)substituted (cyclo)alk(en)yl, -aryl; Z1 = O, SO0-2, (cyclo)(alkyl)imino; m = 0-2] were prepared Thus, L-Me3CO2CNHCH(CHMe2)CO2H was amidated by H2NCH2CHMeOC6H4(OMe)-4 and the deprotected product amidated by ClCO2CHMe2 to give L-I [R1 = R3 = CHMe2, R2 = R4 = R5 = H, R6 = C6H4(OMe)-4, Z = CH2CHMe, Z1 = O, m = 0] which reduced Phytophthora infestans infestation of tomato plants from 75% (control) to 5% when sprayed at 250ppm.

IT **172209-32-4P 172209-36-8P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-(aryl- and alkoxycarbonyl)valineamides and analogs as agrochem. fungicides)

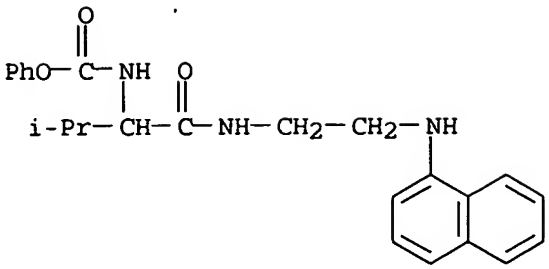
RN 172209-32-4 CAPLUS

CN Carbamic acid, [2-methyl-1-[[[2-(phenylamino)ethyl]amino]carbonyl]propyl]-, phenyl ester (9CI) (CA INDEX NAME)



RN 172209-36-8 CAPLUS

CN Carbamic acid, [2-methyl-1-[[[2-(1-naphthalenylamino)ethyl]amino]carbonyl]propyl]-, phenyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 61 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:994161 CAPLUS
DN 124:56706
TI Preparation of Nα-(alkoxy- and -phenoxycarbonyl)valineamides as agrochemical fungicides
IN Wagner, Oliver; Eicken, Karl; Ammermann, Eberhard; Lorenz, Gisela; Mueller, Thomas
PA BASF A.-G., Germany
SO Ger. Offen., 35 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI DE 4407022	A1	19950907	DE 1994-4407022		19940303
WO 9523786	A1	19950908	WO 1995-EP606		19950220
W: AU, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, MX, NO, NZ, PL, RO, RU, UA, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
			DE 1994-4407022	A	19940303
			DE 1994-4438738	A	19941029
AU 9517582	A1	19950918	AU 1995-17582		19950220
			DE 1994-4407022	A	19940303
			DE 1994-4438738	A	19941029
			WO 1995-EP606	W	19950220
ZA 9501726	A	19960902	ZA 1995-1726		19950302
			DE 1994-4407022	A	19940303

PATENT FAMILY INFORMATION:
FAN 1995:994533

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI WO 9523786	A1	19950908	WO 1995-EP606		19950220
W: AU, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, MX, NO, NZ, PL, RO, RU, UA, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
			DE 1994-4407022	A	19940303
			DE 1994-4438738	A	19941029
DE 4407022	A1	19950907	DE 1994-4407022		19940303
DE 4438738	A1	19960502	DE 1994-4438738		19941029
AU 9517582	A1	19950918	AU 1995-17582		19950220
			DE 1994-4407022	A	19940303
			DE 1994-4438738	A	19941029
			WO 1995-EP606	W	19950220

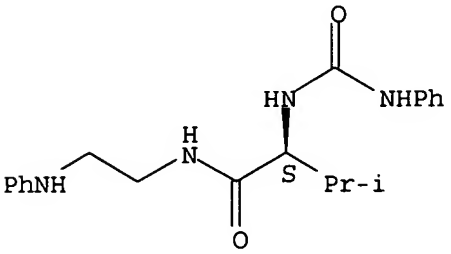
OS MARPAT 124:56706
AB R1O2CNR2CR3R4CONR5(CR2)mAYR6 [A = (cyclo)alkylene, alkylidene, etc.; R = H, (halo)alk(en)yl, cycloalk(en)yl, etc.; R1 = (halo)alk(en)yl, cycloalk(en)yl, heterocyclyl, aryl, etc.; R2,R5 = H, (halo)(cyclo)alkyl;

R3 = (un)substituted (cyclo)alkyl; R4 = H, groups cited for R3; R6 = (un)substituted (hetero)aryl; Y = O, SO0-2, (alkyl)imino; m = 0-2] were prepared Thus, L-Me3CO2CNHCH(CHMe2)CO2H was amidated by H2NCH2CHMeOC6H4Cl-4 and the deprotected product N-acylated by ClCO2CHMe2 to give title compound I (R1 = CHMe2). I (R = Ph) reduced Plasmopara viticola infestation of grape leaves from 65 to 5% at 250ppm.

IT **171847-56-6P 171847-67-9P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of Nα-(alkoxy- and -phenoxycarbonyl)valineamides as agrochem. fungicides)

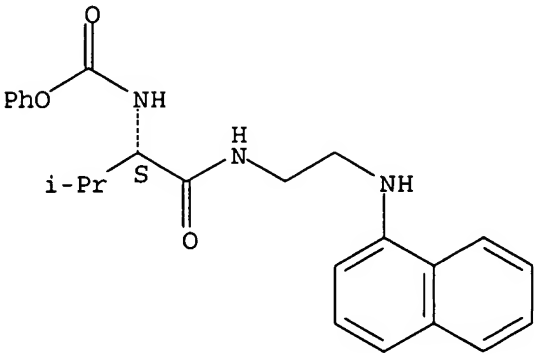
RN 171847-56-6 CAPLUS
CN Butanamide, 3-methyl-2-[[(phenylamino)carbonyl]amino]-N-[2-(phenylamino)ethyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 171847-67-9 CAPLUS
CN Carbamic acid, [2-methyl-1-[[[2-(1-naphthalenylamino)ethyl]amino]carbonyl]propyl]-, phenyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

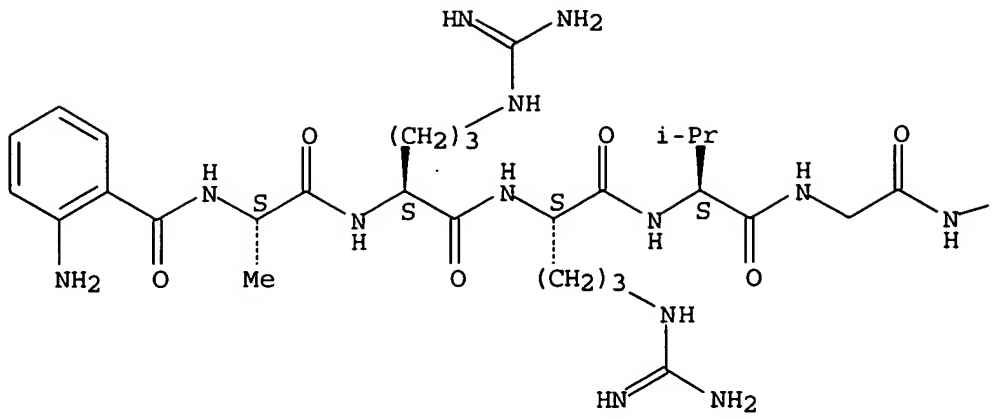


L4 ANSWER 62 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:950422 CAPLUS
DN 124:80361
TI Substrate specificity of rabbit liver metalloendopeptidase and its new fluorogenic peptide substrates
AU Kojima, Naoko; Kawabata, Shun-ichiro; Makinose, Yuichi; Nishino, Norikazu; Iwanaga, Sadaaki
CS Dep. Biol., Kyushu Univ., Fukuoka, 812-81, Japan
SO Journal of Biochemistry (Tokyo) (1995), 118(4), 855-61
CODEN: JOBIAO; ISSN: 0021-924X

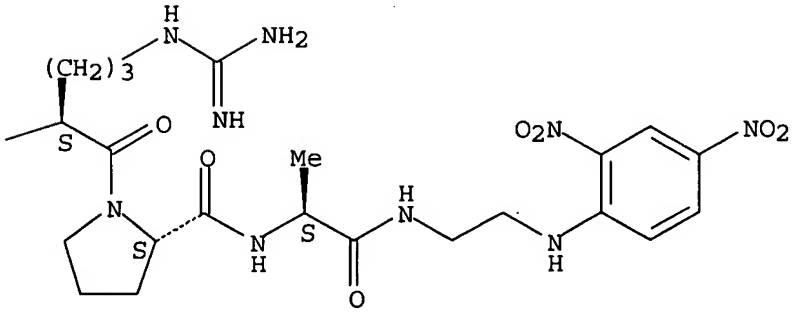
PB Japanese Biochemical Society
DT Journal
LA English
AB A metalloendopeptidase (MEP) isolated from rabbit liver microsomes with substrate specificity for peptides containing Arg at the P1 and P4 positions has recently proved to be identical to soluble angiotensin-binding protein present in the cytosol. Here the authors describe the peptide-degrading specificity of MEP, determined using various bioactive peptides and novel fluorogenic substrates for the enzyme. MEP degraded oligopeptides, including bradykinin, α-neoendorphin, bovine adrenal medulla dodecapeptide, substance P, bombesin, neurotensin, and α-endorphin, but not polypeptides such as reduced lysozyme and histone H4, hence, MEP probably belongs to the family of endo-oligopeptidases. It cleaved most preferentially at the -Phe-Ser- bond of bradykinin (kcat/Km = 2.8+104 M-1·s-1) but did not cleave high mol. weight and low mol. weight kininogens, the precursors of bradykinin. MEP did not cleave angiotensin I, dynorphin A 1-13, somatostatin, and LH-releasing hormone, some of which are good substrates for metalloendopeptidase-24.15, metalloendopeptidase-24.16, N-arginine dibasic convertase, and yeast endopeptidase-24.15 related peptidase. An active site-directed inhibitor of metalloendopeptidase-24.15, N-[1-(R,S)-carboxyl-3-phenylpropyl]-Ala-Ala-Phe-p-aminobenzoate also had no effects on the amidolytic activity of MEP. Based on the cleavage sites of bioactive peptides and processing sites of vitamin K-dependent proproteins, intramolecularly quenched fluorogenic peptide substrates were newly synthesized. Among the thirteen substrates used, the most reactive was 2-aminobenzoyl-Ala-Arg-Val-Arg-Arg-Ala-Asn-Ser-2,4-dinitroanilinoethylamide (kcat/Km = 9.3+105 M-1·s-1). An angiotensin antagonist, [Sar1, Ala8]-angiotensin II, inhibited hydrolysis of the substrate by MEP in a competitive manner (Ki = 7.6 μM). MEP cleaved oligopeptides even on the carboxyl side of proline residue and these peptides are resistant to hydrolysis by the cytosol-derived proteasome, therefore MEP may participate in the catabolism of oligopeptides in the cytosol, together with other endo-oligopeptidases.
IT **172043-77-5 172043-80-0 172043-81-1**
172043-82-2 172043-83-3
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(substrate specificity of rabbit liver metalloendopeptidase and its new fluorogenic peptide substrates)
RN 172043-77-5 CAPLUS
CN L-Alaninamide, N-(2-aminobenzoyl)-L-alanyl-L-arginyl-L-arginyl-L-valylglycyl-L-arginyl-L-prolyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



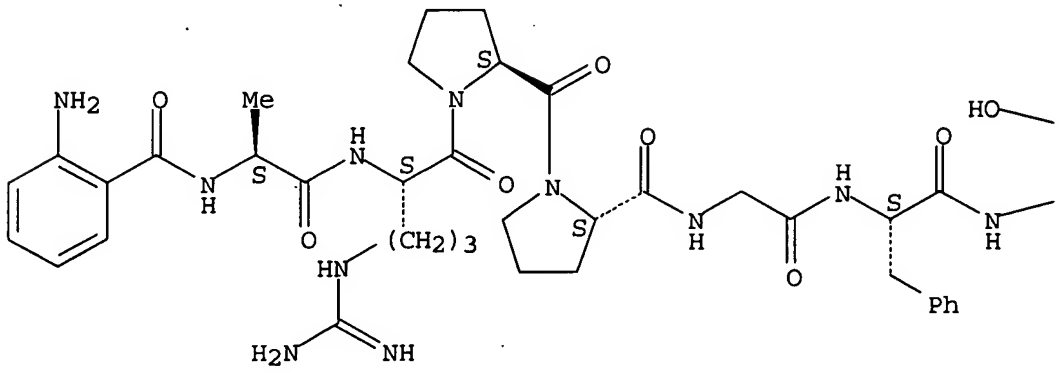
PAGE 1-B



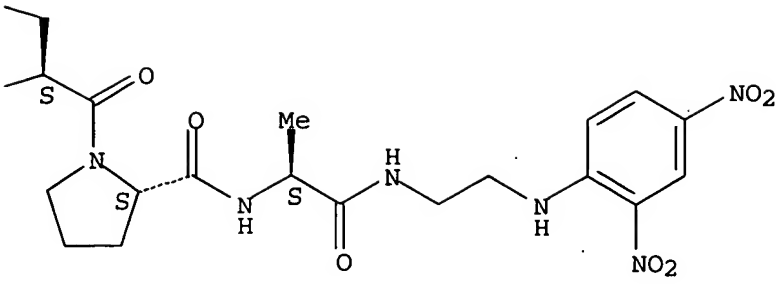
RN 172043-80-0 CAPLUS
CN 1-9-Vespakinin X, N-(2-aminobenzoyl)-9-[N-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-alaninamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



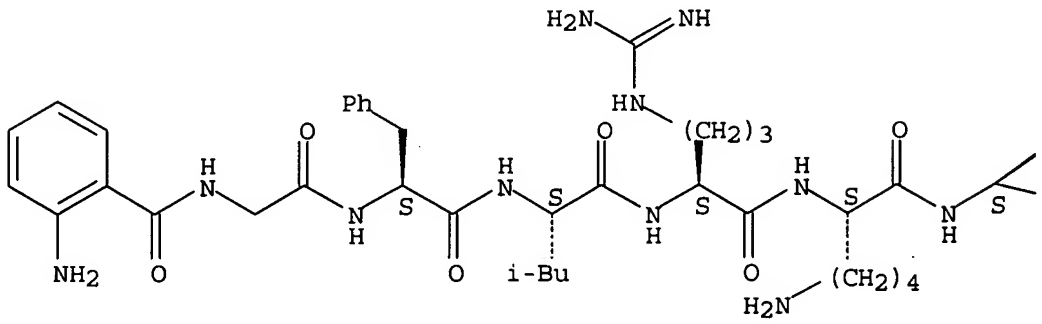
PAGE 1-B



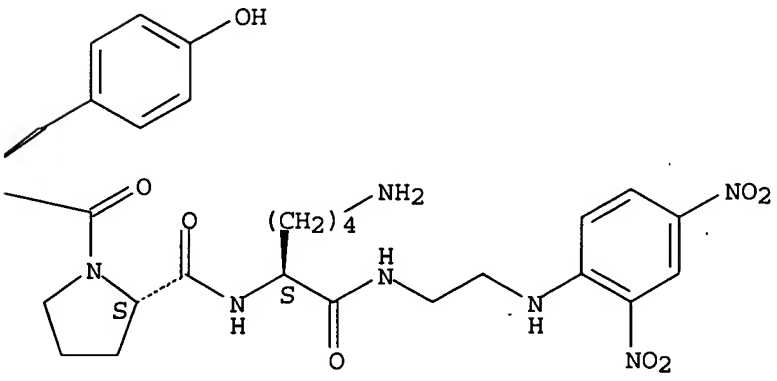
RN 172043-81-1 CAPLUS
CN 3-10-α-Neoendorphin (swine), N-(2-aminobenzoyl)-10-[N-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-lysinamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



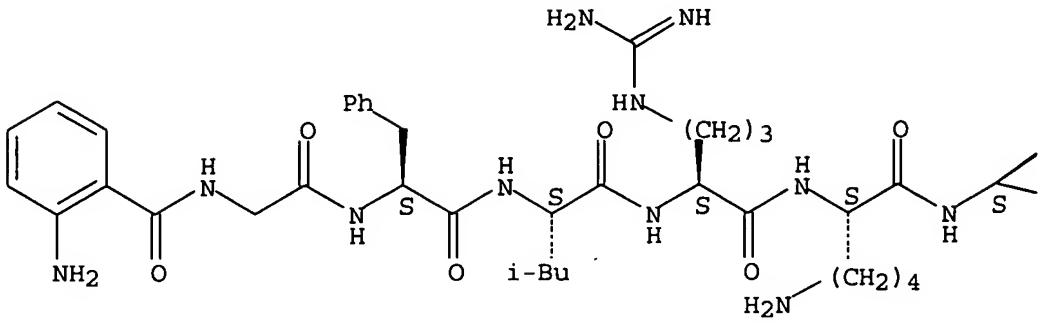
PAGE 1-B



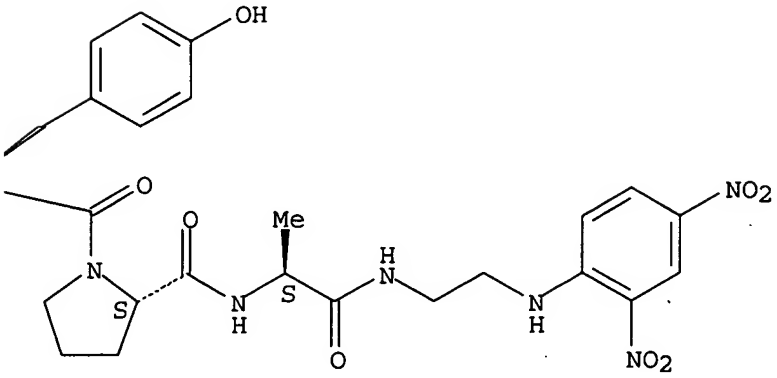
RN 172043-82-2 CAPLUS
CN 3-10-α-Neoendorphin (swine), N-(2-aminobenzoyl)-10-[N-[2-[(2,4-dinitrophenyl)amino]ethyl]-L-alaninamide]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



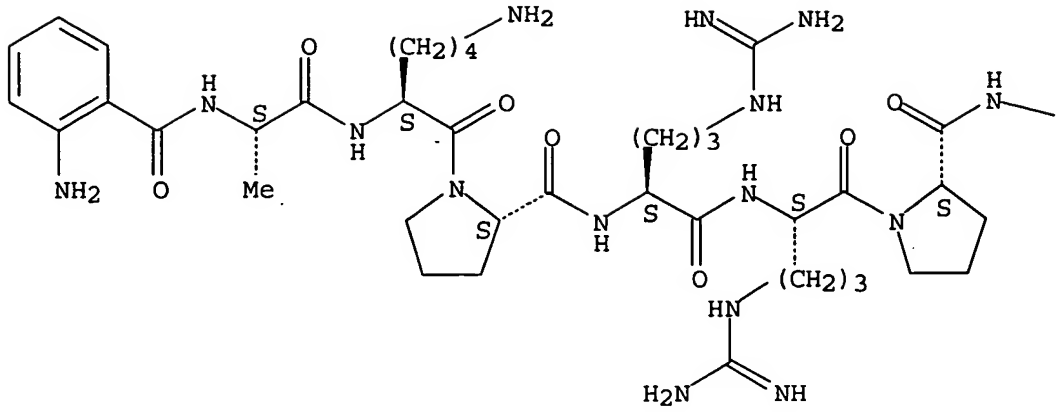
PAGE 1-B



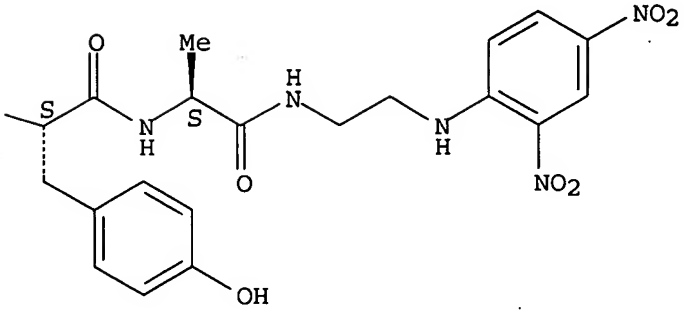
RN 172043-83-3 CAPLUS
CN L-Alaninamide, N-(2-aminobenzoyl)-L-alanyl-L-lysyl-L-prolyl-L-arginyl-L-arginyl-L-prolyl-L-tyrosyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L4 ANSWER 63 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:610349 CAPLUS
DN 123:228889
TI Internally quenched fluorogenic protease substrates: solid-phase synthesis and fluorescence spectroscopy of peptides containing ortho-aminobenzoyl/dinitrophenyl groups as donor-acceptor pairs
AU Hirata, Izaura Yoshico; Cezari, Maria Helena Sedenho; Juliano, Maria Aparecida; Juliano, Luiz
CS Dep. Biophysics, Escola Paulista Medicina, Sao Paulo, 04044-020, Brazil
SO Letters in Peptide Science (1995), 1(6), 299-308
CODEN: LPSCEM; ISSN: 0929-5666
PB ESCOM
DT Journal
LA English
AB A general procedure, using the commonly employed solid-phase peptide synthesis methodol. for obtaining internally quenched fluorogenic peptides with o-aminobenzoyl and dinitrophenyl groups as donor-acceptor pairs, is presented. The essential feature of this procedure is the synthesis of an Nα-tert-butoxycarbonyl (Boc) or 9-fluorenylmethoxycarbonyl (Fmoc) glutamic acid derivative with the α-carboxyl group bound to N-(2,4-dinitrophenyl)ethylenediamine (EDDnp), which provides the quencher moiety attached to the C-terminus substrate. The fluorescent donor group, o-aminobenzoic acid (Abz), is incorporated into the resin-bound peptide in the last coupling cycle. Depending on the resin type used,

Abz-peptidyl-Gln-EDDnp or Abz-peptidyl-Glu-EDDnp is obtained. Using the procedure described above, substrates for human renin and tissue kallikreins were synthesized. Spectrofluorometric measurements of Abz bound to the α-amino group of proline showed that strong quenching of Abz fluorescence occurs in the absence of any acceptor group.

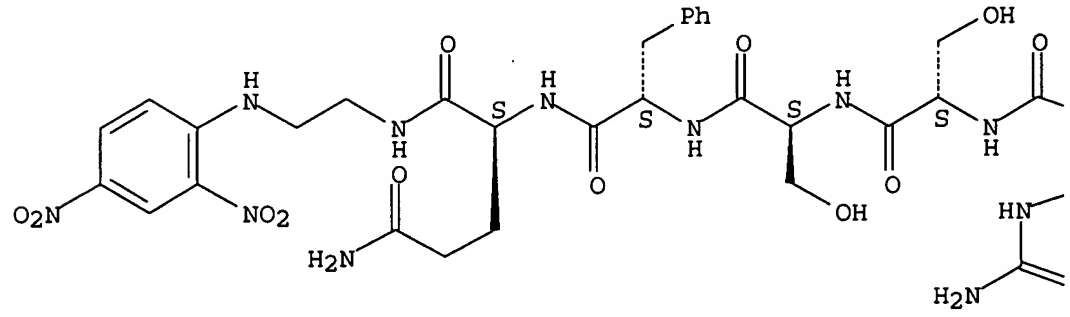
IT **162851-80-1P 168432-01-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase synthesis, enzymic hydrolysis, and fluorescence spectroscopy of aminobenzoylpeptide dinitrophenylaminoethylamides)

RN 162851-80-1 CAPLUS

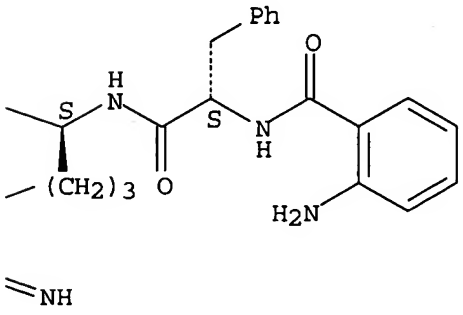
CN L-Glutamamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-arginyl-L-seryl-L-seryl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

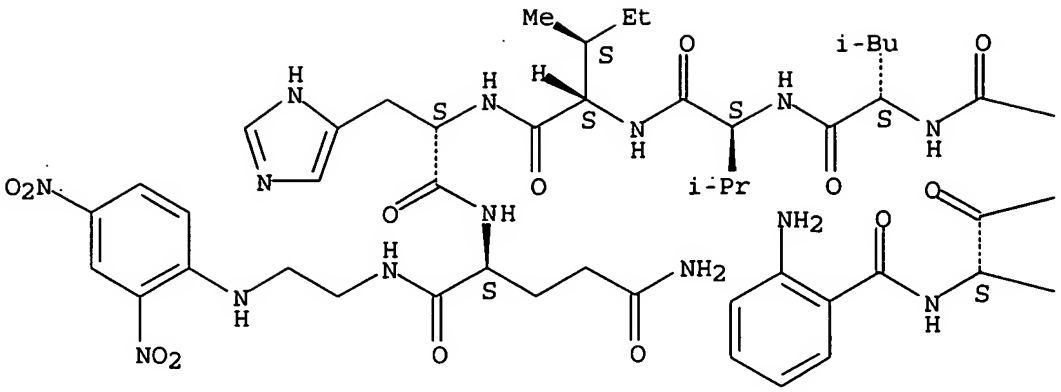


RN 168432-01-7 CAPLUS

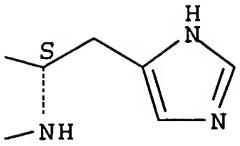
CN L-Glutamamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-histidyl-L-leucyl-L-valyl-L-isoleucyl-L-histidyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

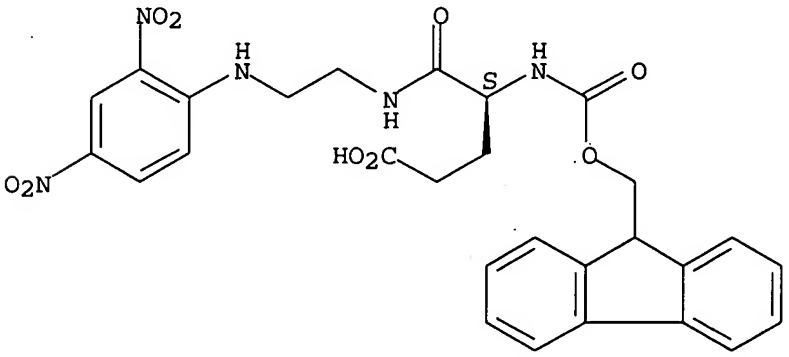


IT **168432-13-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase synthesis, enzymic hydrolysis, and fluorescence spectroscopy of aminobenzoylpeptide dinitrophenylaminoethylamides)

RN 168432-13-1 CAPLUS

CN Pentanoic acid, 5-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-4-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-5-oxo-, (4S)- (9CI) (CA INDEX NAME)

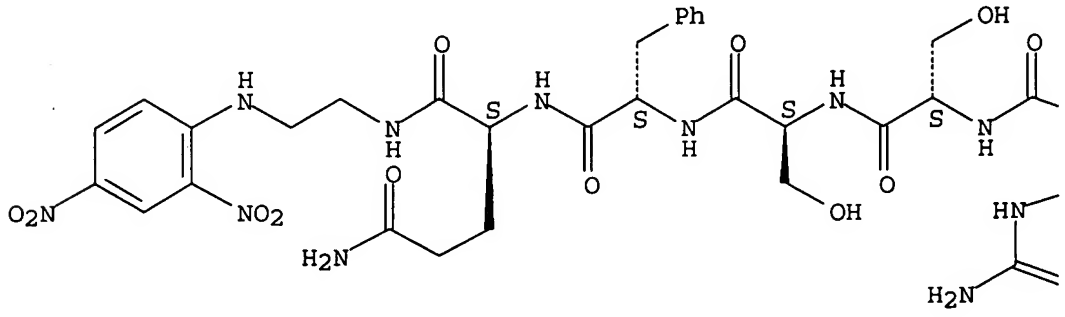
Absolute stereochemistry.



L4 ANSWER 64 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:381727 CAPLUS
DN 122:285299
TI Determinants of the unusual cleavage specificity of lysyl-bradykinin-releasing kallikreins
AU Chagas, Jair R.; Portaro, Fernanda C. V.; Hirata, Isaura Y.; Almeida, Paulo C.; Juliano, Maria A.; Julianao, Luiz; Prado, Eline S.
CS Dep. Biophys., Escola Paulista de Medicina, Sao Paulo, 04044-020, Brazil
SO Biochemical Journal (1995), 306(1), 63-9
CODEN: BIJOAK; ISSN: 0264-6021
PB Portland Press
DT Journal
LA English
AB Kinetic data for the hydrolysis by human tissue kallikrein of fluorogenic peptides with o-aminobenzoyl-Phe-Arg (Abz-FR) as the acyl group and different leaving groups demonstrate that interactions with the S'1, S'2 and S'3 subsites are important for cleavage efficiency. In addition, studies on the hydrolysis of fluorogenic peptides with the human kininogen sequence spanning the scissile Met-Lys bond [Abz-M-I-S-L-M-K-R-P-N-(2,4-dinitrophenyl)ethylenediamine] and analogs with different residues at positions P'1, P'2 and P'3 showed that (a) the presence of a proline residue at P'3 and the interactions with the tissue kallikrein-binding sites S2 to S'2 are determinants of Met-Lys bond cleavage and (b) residues P3, P4 and/or P5 are important for cleavage efficiency. The substitution of phenylalanine for methionine or arginine in substrates with scissile Met-Lys or Arg-Xaa bonds demonstrated that lysyl-bradykinin-releasing tissue kallikreins also have a primary specificity for phenylalanine. The replacement of arginine by phenylalanine in (D)P-F-R-p-nitroanilide (pNA) produced an efficient and specific chromogenic substrate (D)P-F-F-pNA, for the lysyl-bradykinin-releasing tissue kallikreins as it is resistant to plasma kallikrein and other arginine hydrolases.
IT **162851-80-1 162851-86-7 162851-87-8**
162851-88-9 162851-89-0
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(determinants of unusual cleavage specificity of lysyl-bradykinin-releasing kallikreins)
RN 162851-80-1 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-phenylalanyl-L-arginyl-L-seryl-L-seryl-L-phenylalanyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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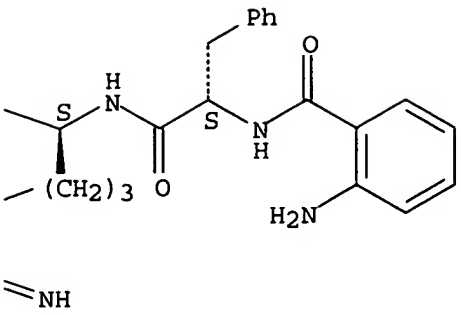
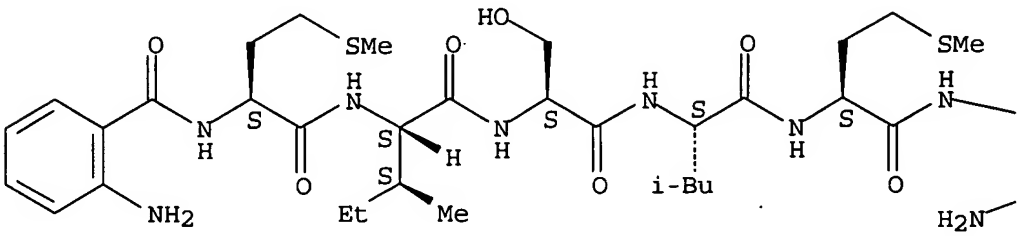


RN 162851-86-7 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-methionyl-L-isoleucyl-L-seryl-L-leucyl-L-methionyl-L-lysyl-L-arginyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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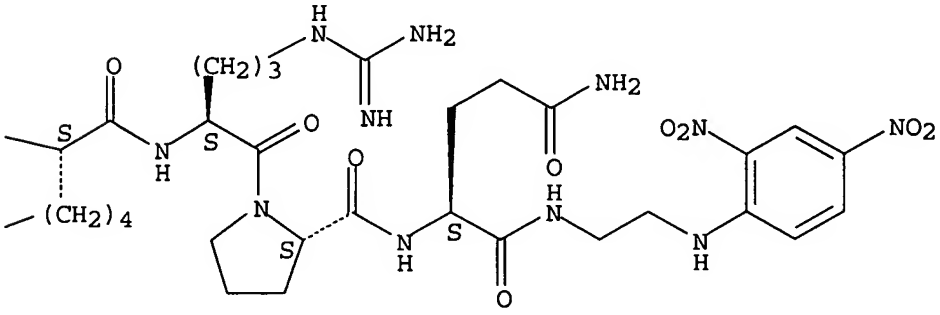
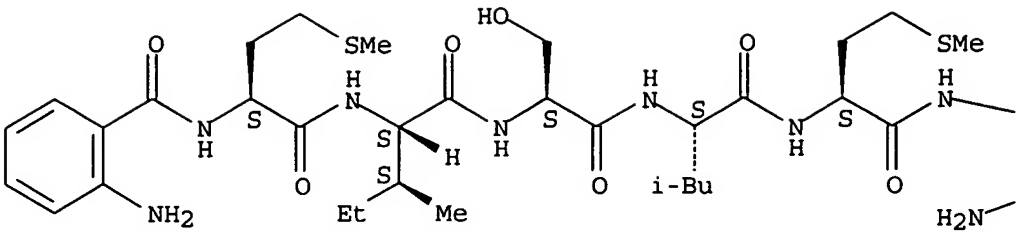


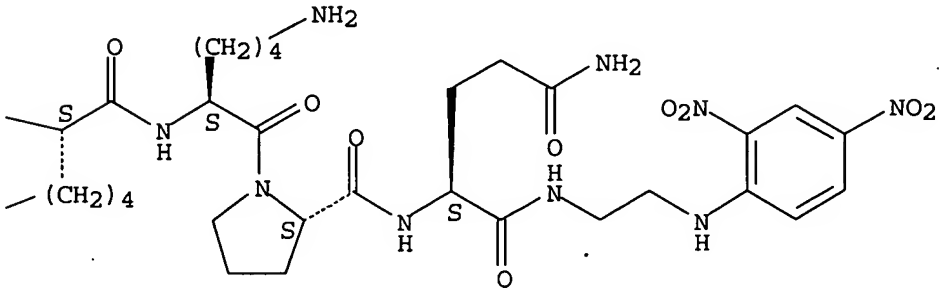
RN 162851-87-8 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-methionyl-L-isoleucyl-L-seryl-L-leucyl-L-methionyl-L-lysyl-L-lysyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



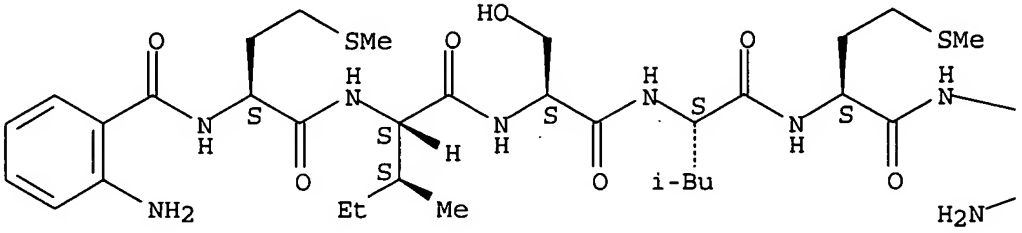
PAGE 1-B



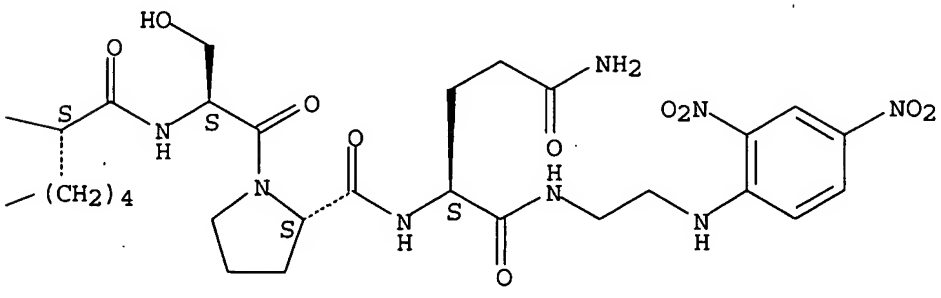
RN 162851-88-9 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-methionyl-L-isoleucyl-L-seryl-L-leucyl-L-methionyl-L-lysyl-L-seryl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



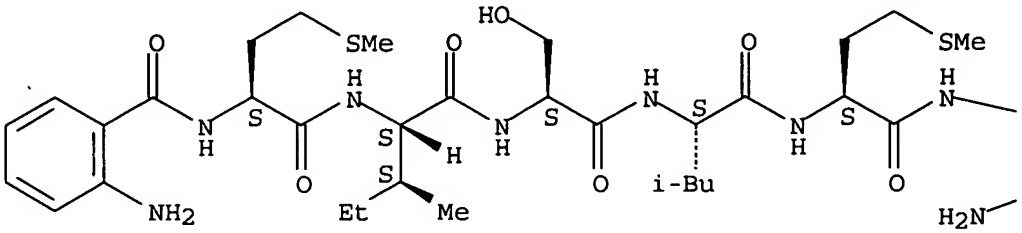
PAGE 1-B



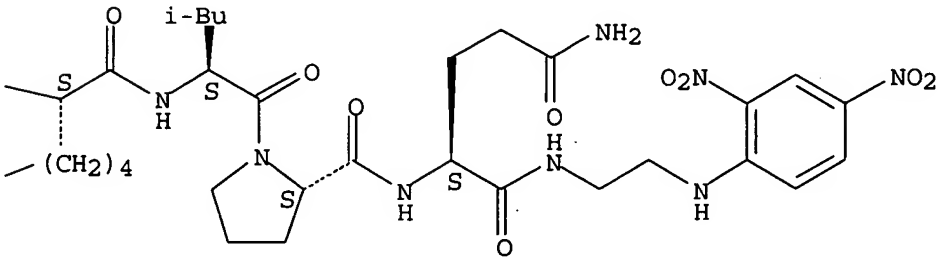
RN 162851-89-0 CAPLUS
CN L-Glutamamide, N-(2-aminobenzoyl)-L-methionyl-L-isoleucyl-L-seryl-L-leucyl-L-methionyl-L-lysyl-L-leucyl-L-prolyl-N1-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L4 ANSWER 65 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:66748 CAPLUS
DN 122:208488
TI Fluorescent oligopeptide substrates for papain: Effect of prime substituents on kinetic constants
AU Garcia-Echeverria, Carlos; Zhao, Zhi Cheng; Rich, Daniel H.
CS Sch. Pharm., Univ. Wisconsin, Madison, WI, 53706, USA
SO Pept. 1992, Proc. Eur. Pept. Symp., 22nd (1993), Meeting Date 1992, 475-6. Editor(s): Schneider, Conrad H.; Eberle, Alex N. Publisher: ESCOM, Leiden, Neth.
CODEN: 60LUAN
DT Conference
LA English
AB A series of substrates for determining the catalytic activity cysteine proteinases, especially papain, is described. The rate of hydrolysis by papain was monitored by a fluorescence continuous assay based on resonance energy transfer using 5-[(2-aminoethyl)amino]naphthalene-1-sulfonic acid (EDANS) and 4-(4-dimethylaminophenylazo)benzoic acid (DABCYL) as fluorescent donor and quenching acceptor, resp. These 2 groups were incorporated into peptides with the general structure: DABCYL-Lys-Phe-Gly-Xxx-Yyy-Ala-EDANS (Xxx = Phe, Ile, Val Gly, Gln, Asn; Yyy = Ala; and Xxx = Gly; Yyy = Phe, Leu, Val, Ala, Asn) which were used to evaluate the hydrophobicity of the amino acid side-chains in the P1' and P2' positions. Papain hydrolysis resulted in a relief of fluorescence quenching as the donor and acceptor separated The increase in fluorescence was proportional to the concentration of

peptide fragment H-Xxx-Yyy-Ala-EDANS, which was identified for each substrate by anal. HPLC after extensive enzymic digestion. The results showed that single amino acid replacements in the P1' or P2' positions of the model substrate affected the kinetic consts. for papain-catalyzed hydrolysis.

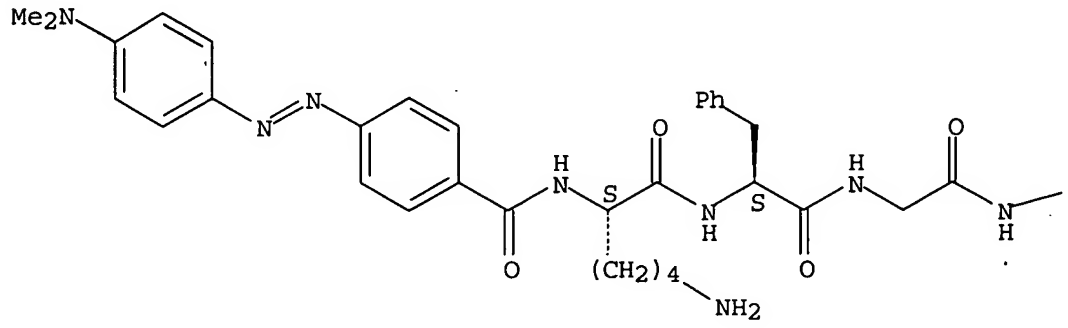
IT **145898-74-4**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(effect of fluorescent peptide prime substituents on papain kinetic consts.)

RN 145898-74-4 CAPLUS

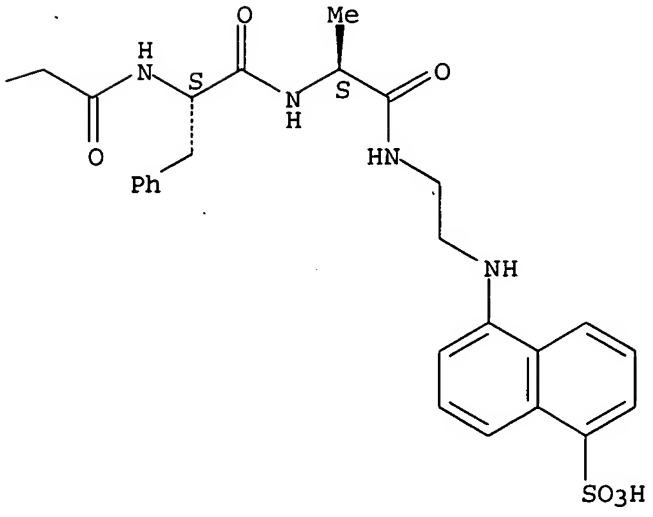
CN L-Alaninamide, N2-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-lysyl-L-phenylalanylglycylglycyl-L-phenylalanyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



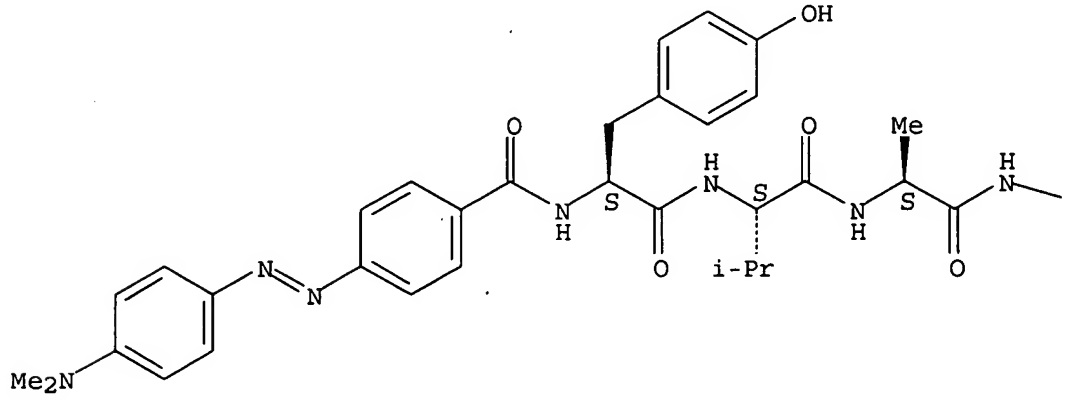
PAGE 1-B



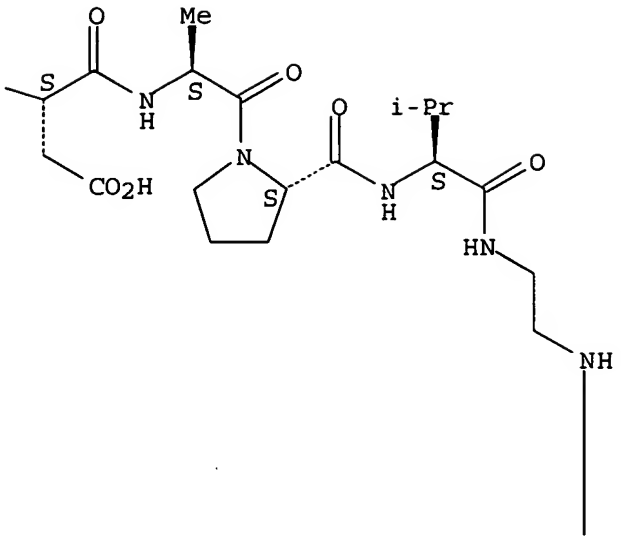
L4 ANSWER 66 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1995:7415 CAPLUS
DN 122:208174
TI Synthesis of a fluorogenic interleukin-1β converting enzyme substrate based on resonance energy transfer
AU Pennington, Michael W.; Thornberry, Nancy A.
CS Bachem Biosci., King of Prussia, PA, USA
SO Peptide Research (1994), 7(2), 72-6
CODEN: PEREEO; ISSN: 1040-5704
DT Journal
LA English
AB Interleukin 1β converting enzyme (ICE) is responsible for processing an inactive 31-kDa precursor to the active, mature 17-kDa II-1β with cleavage occurring between the Asp116-Ala117 amide bond. The authors have prepared a peptide substrate that contains the protease cleavage site situated between two fluorophores located at the termini of the mol. Upon cleavage of DABCYL-Tyr-Val-Ala-Asp-Ala-Pro-Val-EDANS (DABCYL-ICE-EDANS), an increase in fluorescence is observed at the EDANS emission wavelength of 490 nm, permitting a continuous assay of ICE that is useful in the screening of inhibitory compds. The Km and kcat results for hydrolysis of DABCYL-ICE-EDANS by ICE were 11.4 μM and 0.79 s-1. The second order rate constant for hydrolysis of this substrate (kcat/Km = 7.0+104 M-1 s-1) is comparable to that for the cleavage of the previously described fluorogenic substrate, Ac-Tyr-Val-Ala-Asp-AMC (6.4+104 M-1 s-1).
IT **161877-70-9P**
RL: AMX (Analytical matrix); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process)
(fluorogenic peptide analog for determination of interleukin-1β converting enzyme activity)
RN 161877-70-9 CAPLUS
CN L-Valinamide, N-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-tyrosyl-L-valyl-L-alanyl-L-α-aspartyl-L-alanyl-L-prolyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



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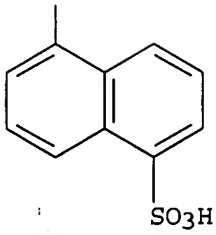

L4 ANSWER 67 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1994:212035 CAPLUS
DN 120:212035
TI Universal standard reagents for analyzing compounds having functional groups, method of preparing same, and use thereof
IN Patchornik, Avraham
PA Patchornik, Zipora, Israel
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9401771	A1	19940120	WO 1993-US6980	19930714

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RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

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OS MARPAT 120:212035

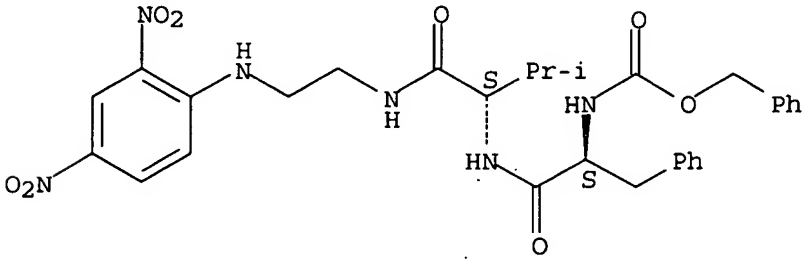
AB A universal standard chemical reagent is described for quant. visual and spectrometric anal. of compds. having reactive functional groups, including mixts. and homologs of the compds. The reagent comprises compound Q-B-f (Q = organic moiety which can be measured quant., visually by color, spectroscopically, or fluorometrically; B = nonreactive organic bridging unit linking Q to a reactive functional group f, the bridging unit being of sufficient length or size to prevent any possible interaction of Q that might alter its spectroscopic properties even upon derivatization; f = reactive group which can react with a compound to form covalently bonded derivs.). Chlorodinitrobenzene was reacted with 3-aminopropanol in MeOH to make DNPNH(CH2)3OH (I). I enabled the prediction of the existence of self-catalytic reactions in acetylated glucose. DNPNH(CH2)3NHNH2 was used to analyze a triglyceride.

IT **154036-19-8 154036-20-1**
RL: FORM (Formation, nonpreparative)
(formation of, with dinitrophenylamine reagent, diastereomers study in relation to)

RN 154036-19-8 CAPLUS

CN L-Valinamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

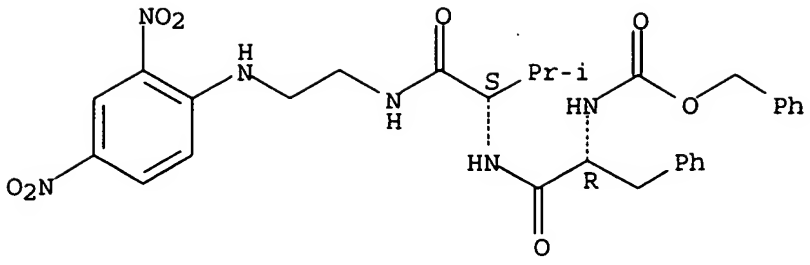
Absolute stereochemistry.



RN 154036-20-1 CAPLUS

CN L-Valinamide, N-[(phenylmethoxy)carbonyl]-D-phenylalanyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **153985-71-8P 153985-72-9P 153985-73-0P**
153985-74-1P 154036-02-9P 154036-03-0P
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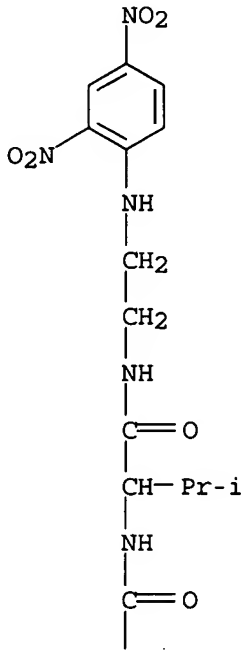
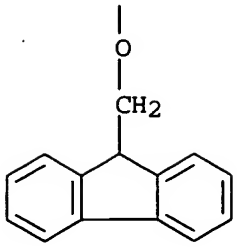
154036-08-5P 154036-09-6P 154036-10-9P
154036-11-0P 154036-13-2P 154036-14-3P
154036-15-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as standard reagent for spectrometric and visual anal. of compds. containing functional groups)

RN 153985-71-8 CAPLUS

CN Carbamic acid, [1-[[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]carbonyl]-2-methylpropyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

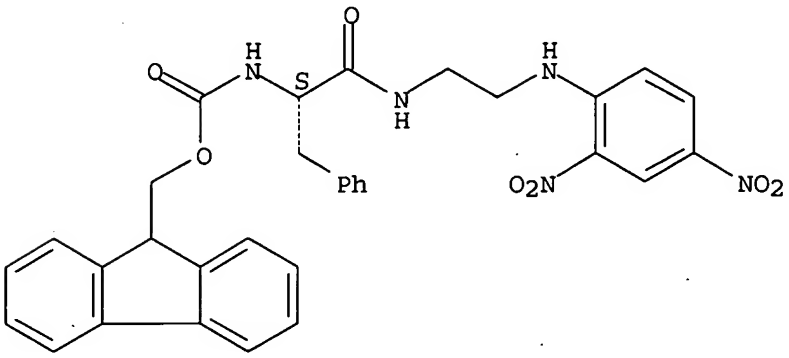
PAGE 1-A





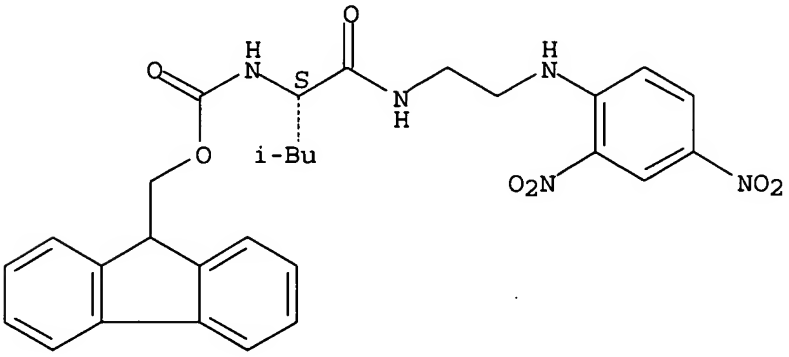
RN 153985-72-9 CAPLUS
CN Carbamic acid, [2-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-2-oxo-1-(phenylmethyl)ethyl]-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



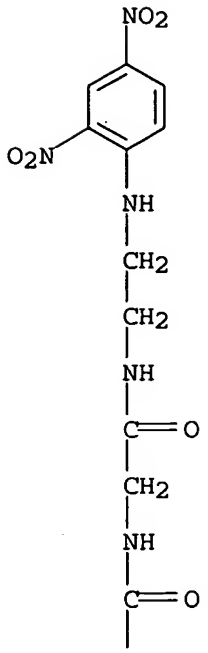
RN 153985-73-0 CAPLUS
CN Carbamic acid, [1-[[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]carbonyl]-3-methylbutyl]-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

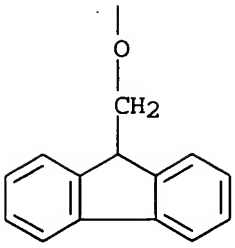


RN 153985-74-1 CAPLUS
CN Carbamic acid, [2-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-2-oxoethyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

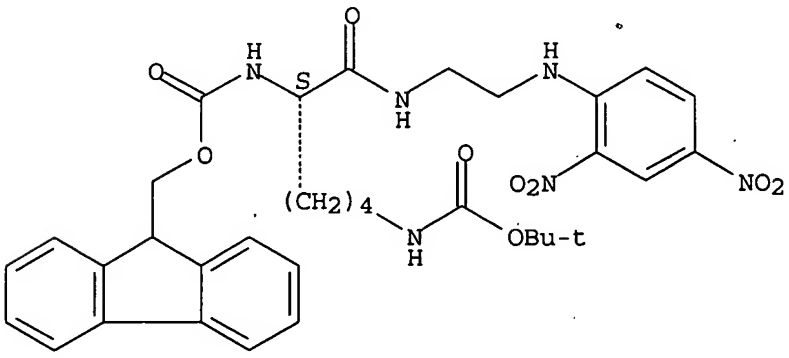


PAGE 2-A



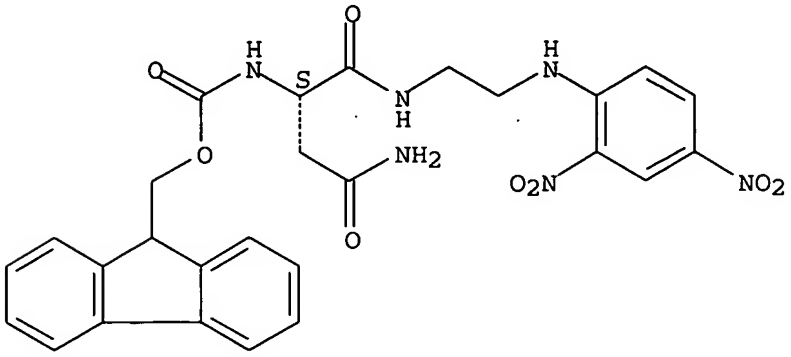
RN 154036-02-9 CAPLUS
CN Carbamic acid, [5-[[(1,1-dimethylethoxy)carbonyl]amino]-1-[[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]carbonyl]pentyl]-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



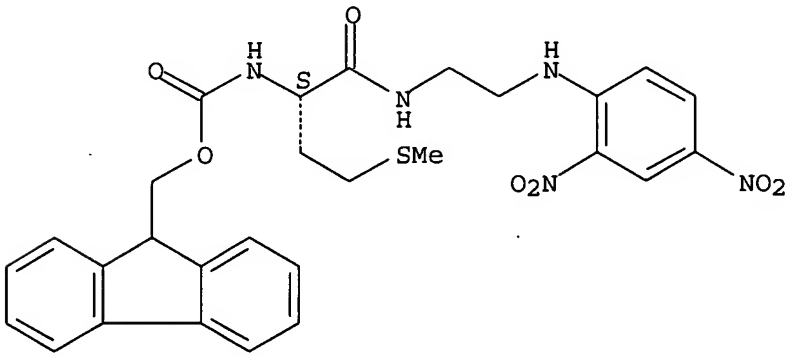
RN 154036-03-0 CAPLUS
CN Carbamic acid, [3-amino-1-[[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]carbonyl]-3-oxopropyl]-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



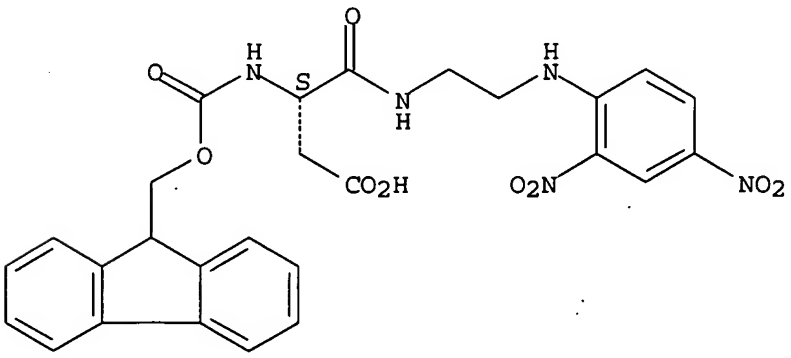
RN 154036-04-1 CAPLUS
CN Carbamic acid, [1-[[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]carbonyl]-3-(methylthio)propyl]-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



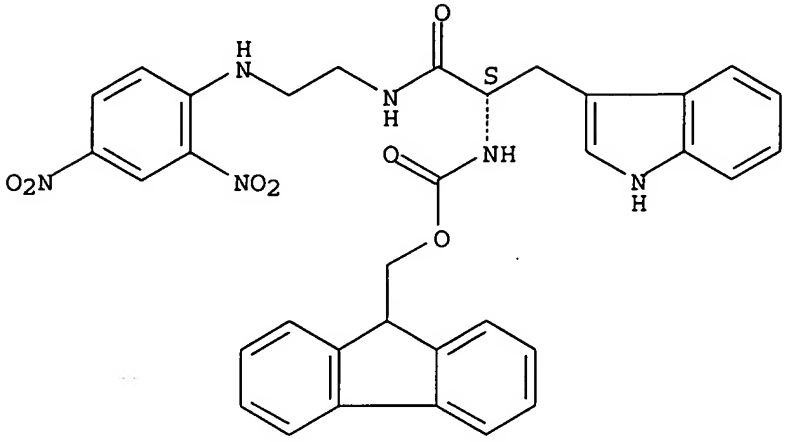
RN 154036-05-2 CAPLUS
CN Butanoic acid, 4-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-3-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-4-oxo-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



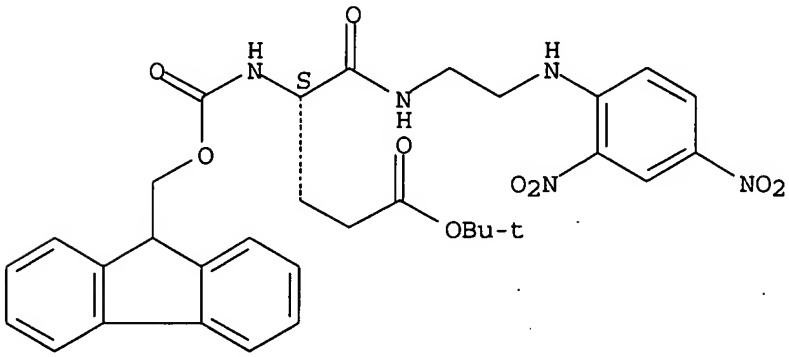
RN 154036-07-4 CAPLUS
CN Carbamic acid, [2-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



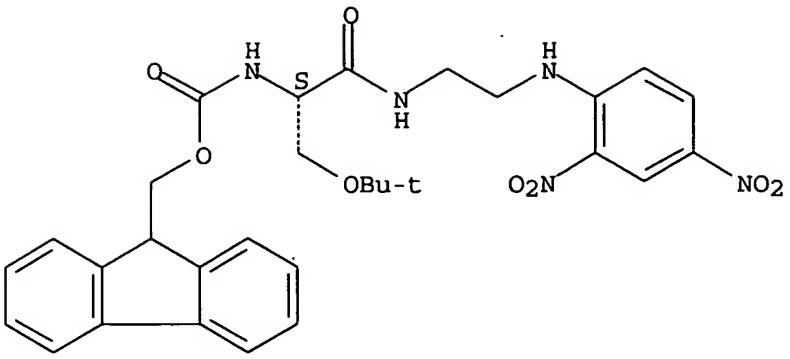
RN 154036-08-5 CAPLUS
CN Pentanoic acid, 5-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-4-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-5-oxo-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



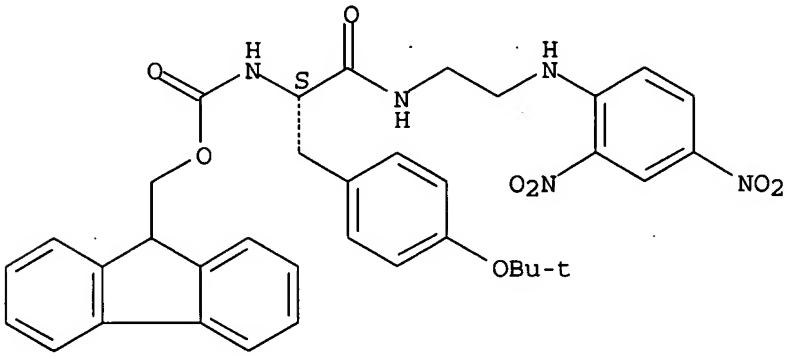
RN 154036-09-6 CAPLUS
CN Carbamic acid, [1-[(1,1-dimethylethoxy)methyl]-2-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-2-oxoethyl]-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



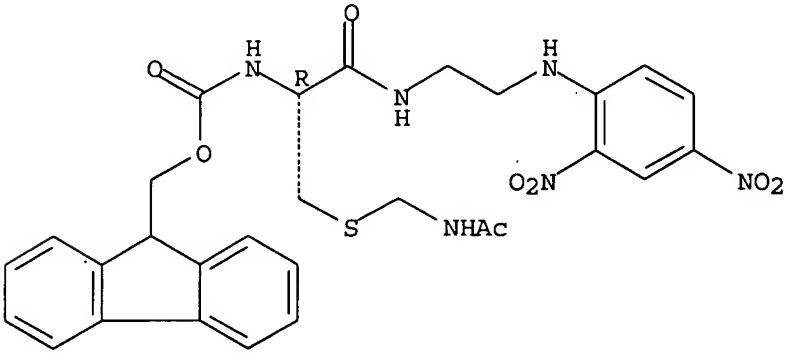
RN 154036-10-9 CAPLUS
CN Carbamic acid, [1-[[4-(1,1-dimethylethoxy)phenyl]methyl]-2-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-2-oxoethyl]-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



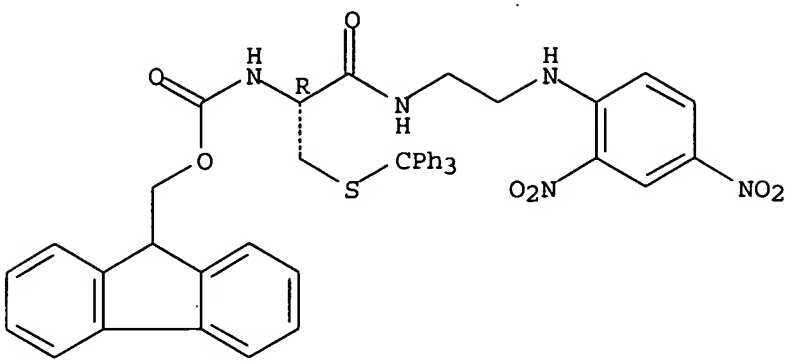
RN 154036-11-0 CAPLUS
CN Carbamic acid, [1-[[[(acetylamino)methyl]thio]methyl]-2-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-2-oxoethyl]-, 9H-fluoren-9-ylmethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



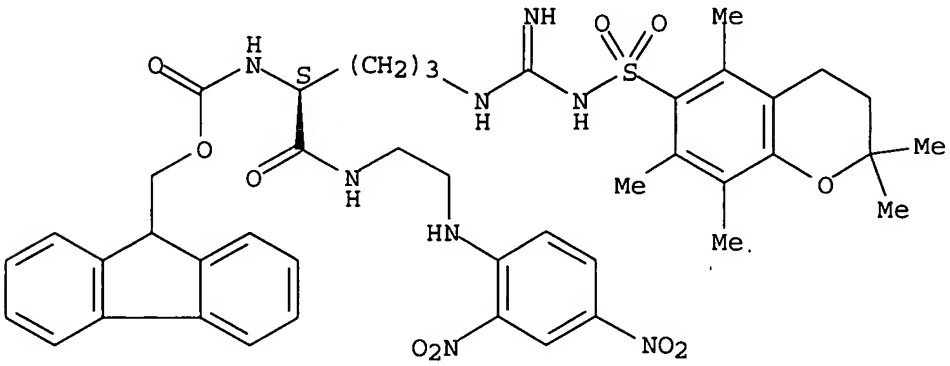
RN 154036-13-2 CAPLUS
CN Carbamic acid, [2-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-2-oxo-1-[[(triphenylmethyl)thio]methyl]ethyl]-, 9H-fluoren-9-ylmethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



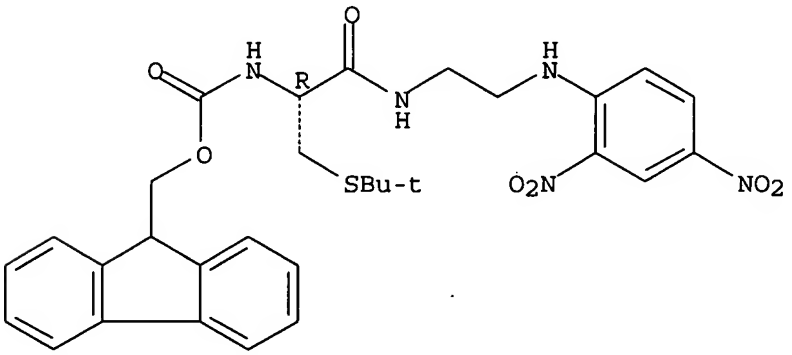
RN 154036-14-3 CAPLUS
CN Carbamic acid, [4-[[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]amino]-1-[[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]carbonyl]butyl]-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 154036-15-4 CAPLUS
CN Carbamic acid, [1-[[(1,1-dimethylethyl)thio]methyl]-2-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-2-oxoethyl]-, 9H-fluoren-9-ylmethyl ester, (R)- (9CI) (CA INDEX NAME)

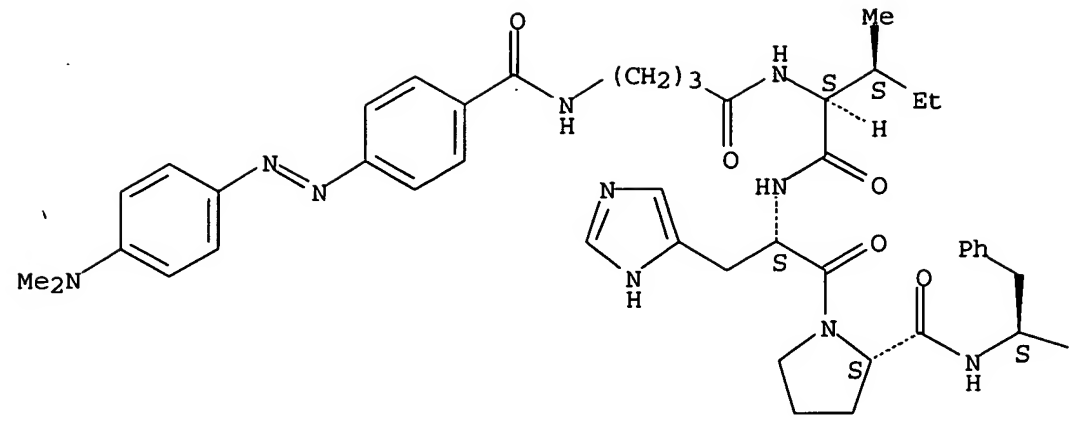
Absolute stereochemistry.



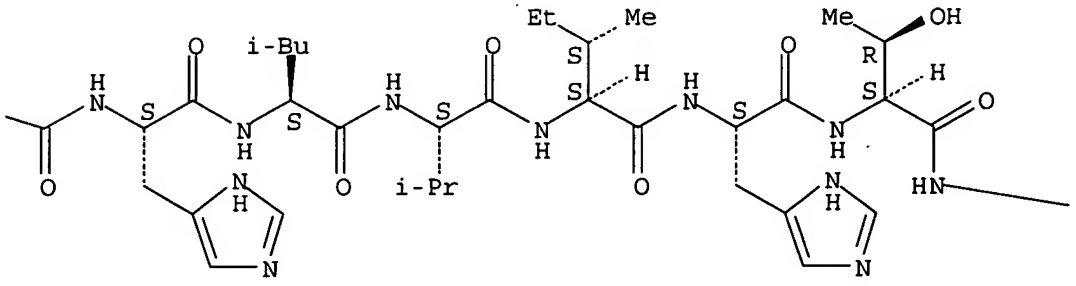
L4 ANSWER 68 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:466189 CAPLUS
DN 119:66189
TI A continuous fluorescence assay of renin activity
AU Wang, Gary T.; Chung, Christine C.; Holzman, Thomas F.; Krafft, Grant A.
CS Pharm. Prod. Div., Abbott Lab., Abott Park, IL, 60064, USA
SO Analytical Biochemistry (1993), 210(2), 351-9
CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
AB A sensitive fluorescence assay that employs a new fluorogenic peptide substrate has been developed to continuously measure the proteolytic activity of human renin. The substrate, DABCYL-gaba-Ile-His-Pro-Phe-His-Leu-Val-Ile-His-Thr-EDANS [where DABCYL=4-(4-dimethylaminophenylazo)benzoi c acid and EDANS=5-[(2-aminoethyl)amino]-naphthalene-1-sulfonic acid], has been designed to incorporate the renin cleavage site that occurs in the N-terminal peptide of human angiotensinogen. The assay relies upon resonance energy transfer-mediated, intramol. fluorescence quenching that occurs in the intact peptide substrate. Efficient fluorescence quenching occurs as a result of favorable energetic overlap of the EDANS excited state and the DABCYL absorption, and the relatively long excited state lifetime of the EDANS fluorophore. Cleavage of the substrate by renin liberates the peptidyl-EDANS fragment from proximity with the DABCYL acceptor, restoring the higher, unattenuated fluorescence of the EDANS moiety. This leads to a time-dependent increase in fluorescence intensity, directly related to the extent of substrate consumed by renin cleavage. The kinetics of renin-catalyzed hydrolysis of this substrate have been shown to be consistent with a simple substrate inhibition model with a substrate Km .simeq. 1.5 μM at physiol. pH; cleavage of the substrate occurs specifically at the Leu-Val bond and corresponds to the renin cleavage site of angiotensinogen, as reported earlier. This report describes in detail the synthesis of the fluorogenic renin substrate and its application in assays of renin activity. Assay sensitivity has been evaluated by a series of enzyme dilution expts. using the continuous assay format, showing that the assay can detect renin as low as 30 ng/mL after an incubation of only 3-5 min. It was estimated that with extended incubation time (2-3 h) the assay can detect renin at 0.5 ng/mL concentration level. An automated, high throughput fluorometric renin assay has been developed for a 96-well microtiter-plate fluorescence reader, which is useful for studies of enzyme inhibitors and enzyme stability.
IT **142988-22-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and renin fluorometric determination using)
RN 142988-22-5 CAPLUS
CN L-Threoninamide, N-[4-[[4-[[4-(dimethylamino)phenyl]azo]benzoyl]amino]-1-oxobutyl]-L-isoleucyl-L-histidyl-L-prolyl-L-phenylalanyl-L-histidyl-L-leucyl-L-valyl-L-isoleucyl-L-histidyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

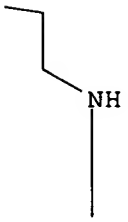
PAGE 1-A



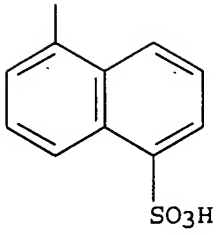
PAGE 1-B



PAGE 1-C



PAGE 2-C

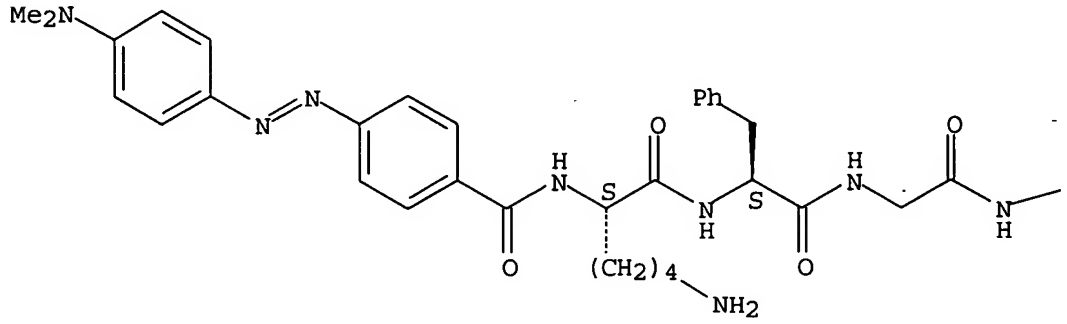


L4 ANSWER 69 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1993:96941 CAPLUS
DN 118:96941
TI Effect of P2' substituents on kinetic constants for hydrolysis by cysteine proteinases
AU Garcia-Echeverria, Carlos; Rich, Daniel H.
CS Sch. Pharm., Univ. Wisconsin, Madison, WI, 53706, USA
SO Biochemical and Biophysical Research Communications (1992), 187(2), 615-19
CODEN: BBRCA9; ISSN: 0006-291X
DT Journal
LA English
AB Intramolecularly quenched fluorogenic peptide substrates with the general sequence, DABCYL-Lys-Phe-Gly-Gly-Xxx-Ala-EDANS (Xxx = Phe, Leu, Val, Ala, or Asn), were utilized to explore the effect of the hydrophobicity of amino acid side-chains in the P2' position on the steady-state kinetic consts. for papain-catalyzed hydrolysis. The results demonstrated that subsite interactions between the enzyme and the peptide substrate modulate the enzyme specificity by slowing the release of the C-terminal product. This series of substrates can be used to characterize substrate specificity studies of other cysteine proteinases.

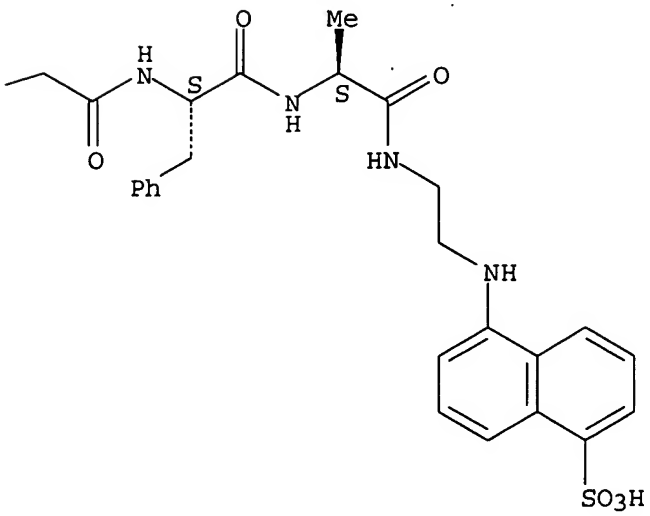
IT **145898-74-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with papain, kinetics of, substrate P2' substituent effect on, enzyme subsite hydrophobic interactions in relation to)
RN 145898-74-4 CAPLUS
CN L-Alaninamide, N2-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-lysyl-L-phenylalanylglycylglycyl-L-phenylalanyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



L4 ANSWER 70 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:551402 CAPLUS
DN 117:151402
TI Cytotoxic N, N'-bis(succinylpeptide) derivatives of 1,4-bis(aminoalkyl)-

5,8-dihydroxyanthraquinones and antibody conjugates thereof

IN Fields, Thomas L.; Sassiver, Martin L.; Crockatt, Linda H.; Upeslacis, Janis

PA American Cyanamid Co., USA

SO Can. Pat. Appl., 110 pp.
CODEN: CPXXEB

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	CA 2036007	AA	19910813	CA 1991-2036007		19910208
				US 1990-479488	A	19900212
	EP 489220	A1	19920610	EP 1991-100267		19910110
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE					
				US 1990-479488	A	19900212

OS MARPAT 117:151402

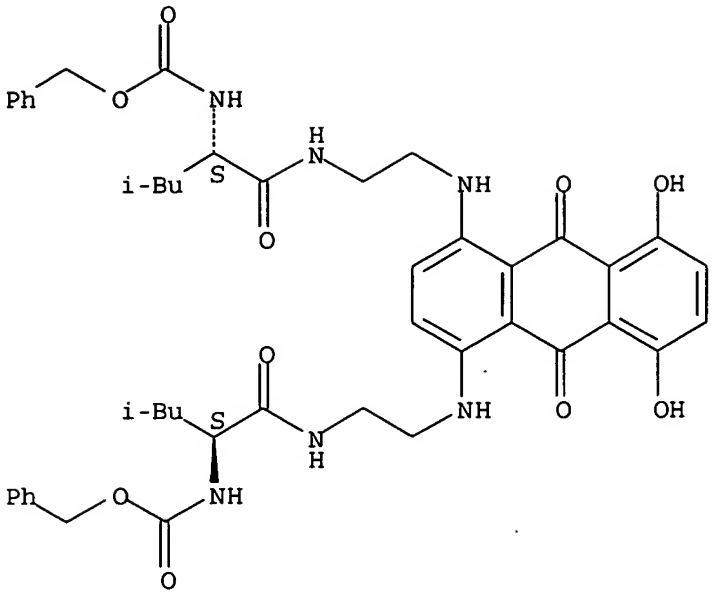
AB Title peptides I (Q = linear or branched C2-4 alkyl; R = amino acid residue, optionally protected by protective group P; E = OH, esterified OH; m = 1-10; q = 1-4) and their antibody conjugates were prepared as neoplasm inhibitors. Thus, I (Q = CH2CH2, R = -Asp-Ser-Ala-Leu-Leu-, E = succinimidyloxy, m = 1, q = 2, II) was prepared from 1,4-bis(2-aminoethylamino)-5,8-dihydroxyanthraquinone by peptide coupling, succinylation, and esterification with N-hydroxysuccinimide. II was conjugated with antibody P96.5. The conjugate containing 60 μg II and 2.2 mg antibody was used to treat mice infected with human melanoma SK-MeO-28. In 35 days the tumor weight in treated mice was 37% of that in untreated mice.

IT **114725-97-2P 114726-15-7P 114726-17-9P**
114726-20-4P 114742-07-3P 114742-50-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking of)

RN 114725-97-2 CAPLUS

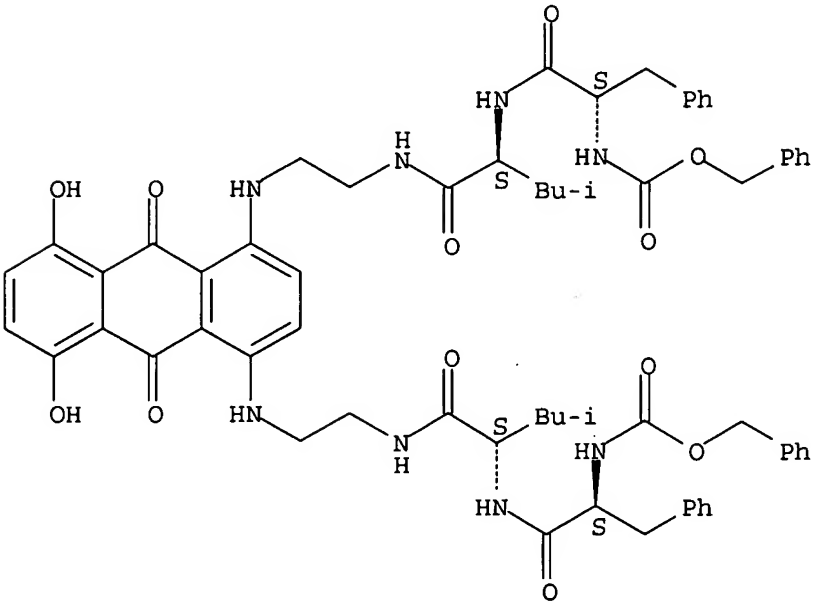
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[1-(2-methylpropyl)-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



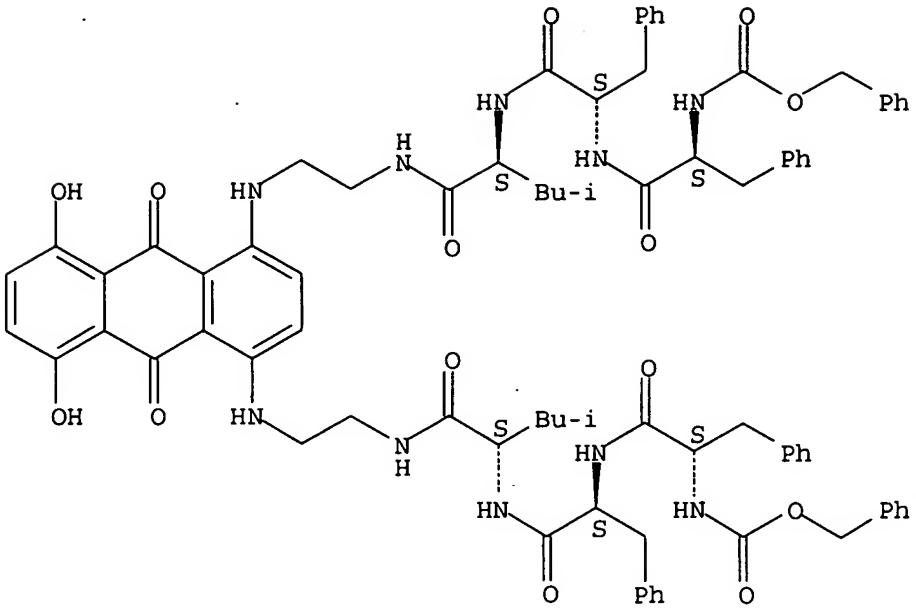
RN 114726-15-7 CAPLUS
CN L-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-[N-[(phenylmethoxy)carbonyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



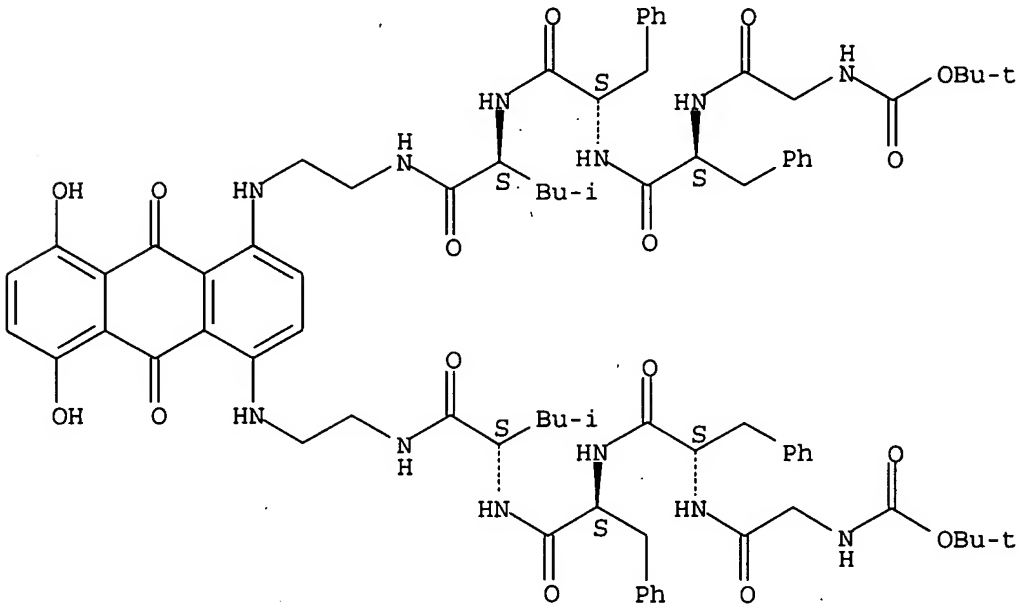
RN 114726-17-9 CAPLUS
CN L-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-[N-[N-[(phenylmethoxy)carbonyl]-L-phenylalanyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 114726-20-4 CAPLUS
CN L-Leucinamide, N-[(1,1-dimethylethoxy)carbonyl]glycyl-L-phenylalanyl-L-phenylalanyl-N-[2-[[4-[[2-[[N-[N-[N-[(1,1-dimethylethoxy)carbonyl]glycyl]-L-phenylalanyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

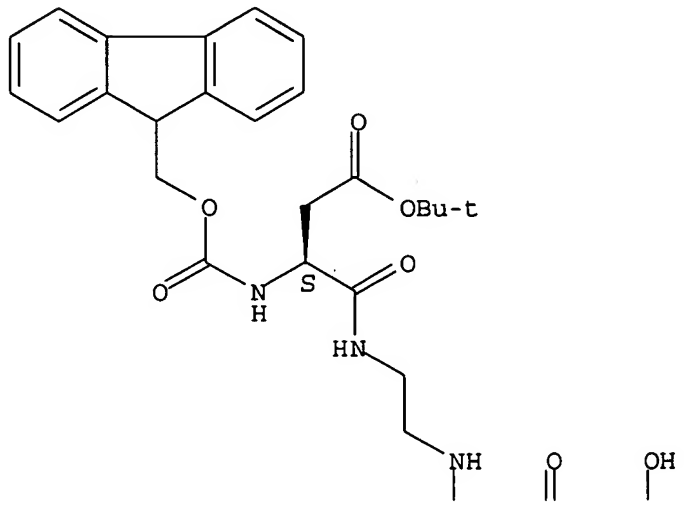


RN 114742-07-3 CAPLUS
CN Butanoic acid, 4,4'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-

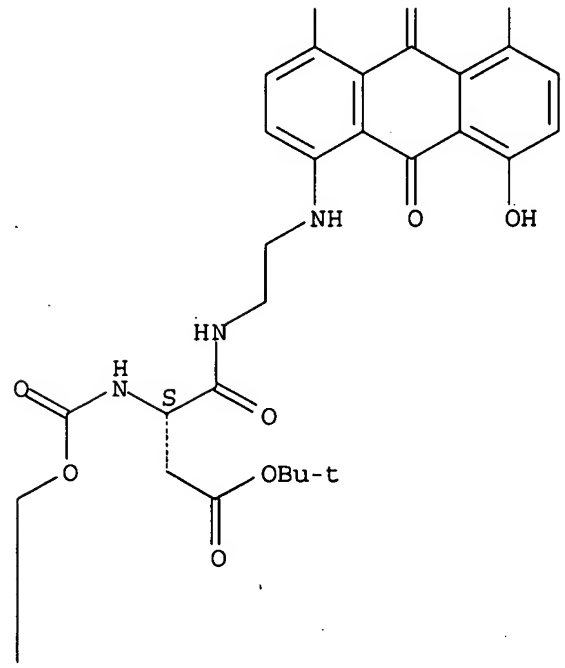
anthracenediyl)bis(imino-2,1-ethanediylimino)]bis[3-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-4-oxo-, bis(1,1-dimethylethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

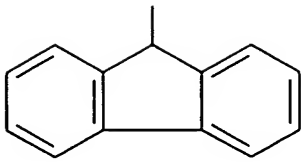
PAGE 1-A



PAGE 2-A



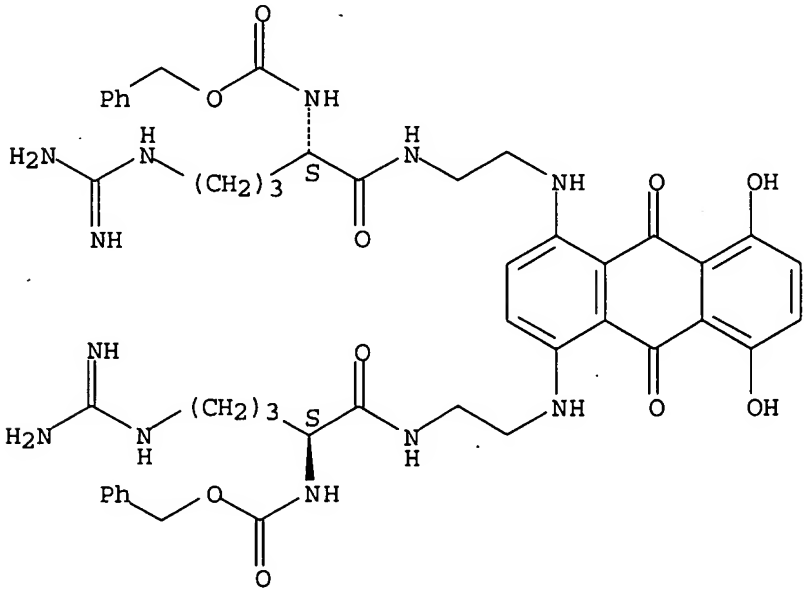
PAGE 3-A



RN 114742-50-6 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[1-[3-[(aminoiminomethyl)amino]propyl]-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, dihydrobromide, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



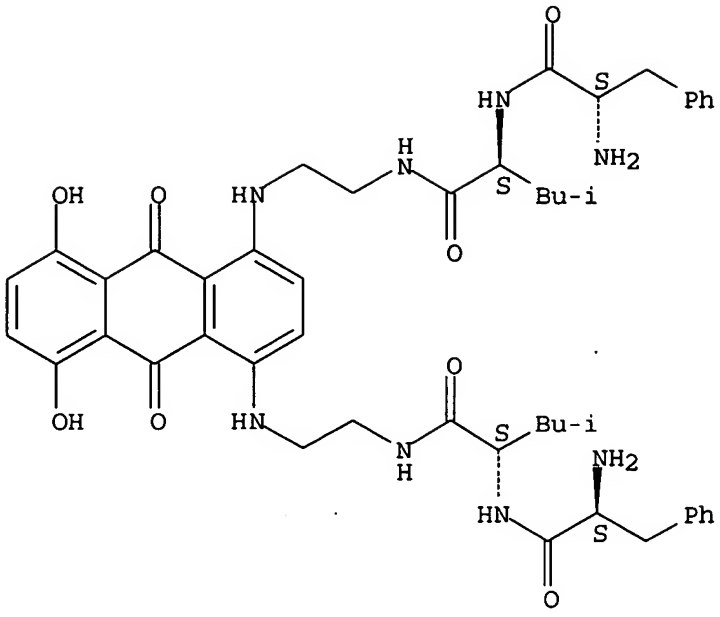
PAGE 2-A

●2 HBr

IT **114726-16-8P 114726-18-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and peptide coupling of)
RN 114726-16-8 CAPLUS
CN L-Leucinamide, L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[(N-L-phenylalanyl-L-leucyl)amino]ethyl]amino]-1-anthracenyl]amino]ethyl]-, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



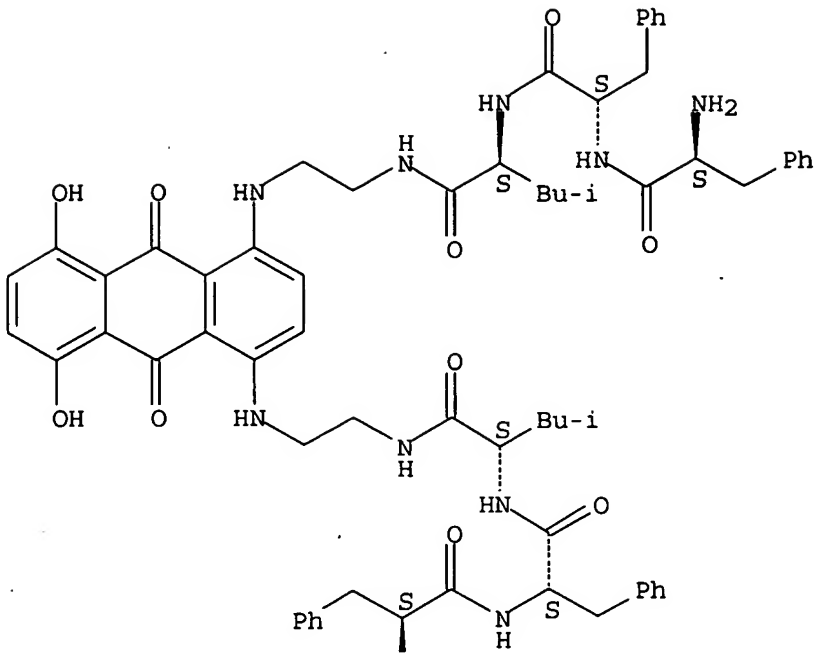
PAGE 2-A

●2 HBr

RN 114726-18-0 CAPLUS
CN L-Leucinamide, L-phenylalanyl-L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-(N-L-phenylalanyl-L-phenylalanyl)-L-leucyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]-, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

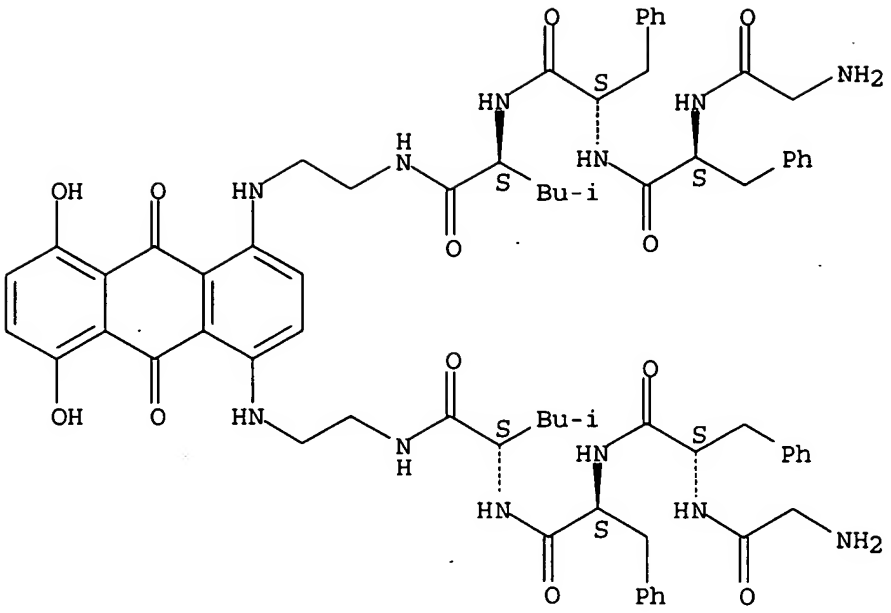
● 2 HBr

IT **114726-22-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and succinylation of)
RN 114726-22-6 CAPLUS
CN L-Leucinamide, glycyl-L-phenylalanyl-L-phenylalanyl-N-[2-[[4-[[2-[[N-[N-(N-glycyl-L-phenylalanyl)-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

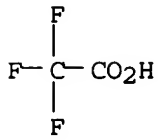
CRN 114726-21-5
CMF C70 H84 N12 O12

Absolute stereochemistry.



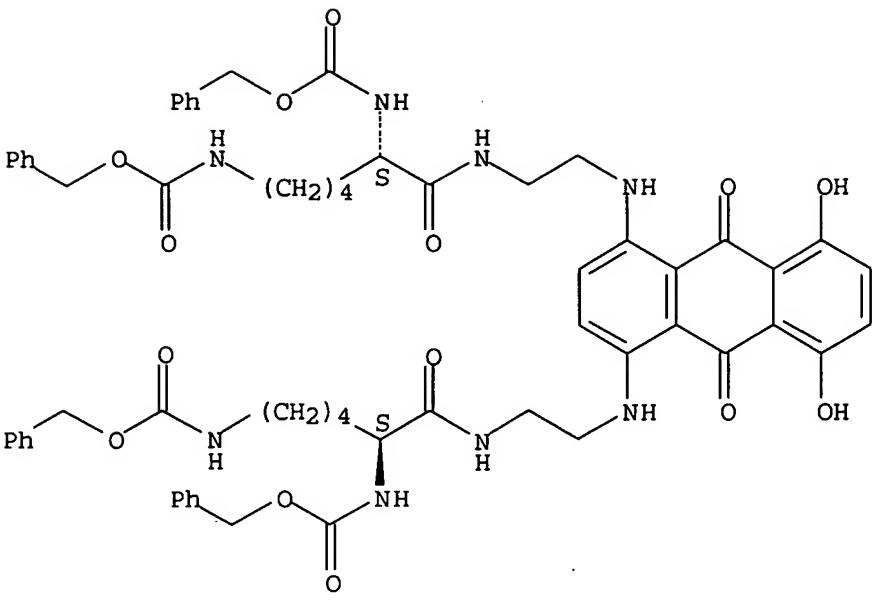
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **114725-99-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 114725-99-4 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino(1-oxo-1,2,6-hexanetriyl)]]tetrakis-, tetrakis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

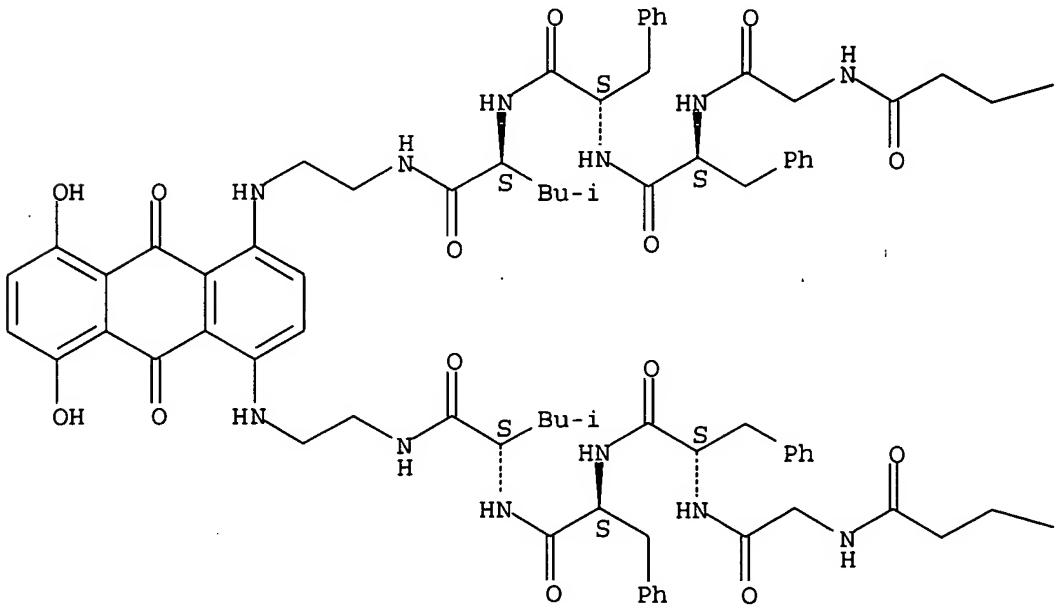
Absolute stereochemistry.

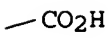


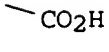
IT **143406-13-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation, conjugation with antibody, and antitumor activity of)
RN 143406-13-7 CAPLUS
CN L-Leucinamide, N-(3-carboxy-1-oxopropyl)glycyl-L-phenylalanyl-L-phenylalanyl-N-[2-[[4-[[2-[[N-[N-[N-(3-carboxy-1-oxopropyl)glycyl]-L-phenylalanyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A







L4 ANSWER 71 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:506860 CAPLUS
DN 117:106860
TI Application of a fluorogenic substrate in the assay of proteolytic activity and in the discovery of a potent inhibitor of Candida albicans aspartic proteinase
AU Capobianco, John O.; Lerner, Claude G.; Goldman, Robert C.
CS Dep. 47M, Abbott Lab., Abbott Park, IL, 60064-3500, USA
SO Analytical Biochemistry (1992), 204(1), 96-102
CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
AB A fluorescent method for monitoring the activity of the secreted Candida carboxyl (aspartic) proteinase (EC 3.4.23.6) was developed using a fluorogenic substrate based on resonance energy transfer. The fluorescent assay was used to monitor proteinase production, purification, and inhibition. The Km for the fluorogenic substrate, 4-(4-dimethylaminophenylazo)benzoyl-γ-aminobutyryl-Ile-His-Pro-Phe-His-Leu-Val-Ile-His-Thr-[5-(2-aminoethyl)amino]naphthalene-1-sulfonic acid, was 4.3 μM at the optimum pH of 4.5. Reaction products were separated by reverse-phase high-performance liquid chromatog. and identified by amino acid anal. or by 252Cf plasma desorption mass spectrometry. Cleavage of the fluorogenic substrate was between the histidine-threonine residues, releasing the fluorescent product, threonine-[5-(2-aminoethyl)amino]naphthalene-1-sulfonic acid. Proteolytic activity was expressed as nanomoles of fluorescent product released at 22°/60 min, pH 4.5, and the release of 0.9 nmol product was equivalent to one Hb proteolytic unit (O.D.A700 increase of 0.100) produced at 37°/60 min, pH 3.5. The aspartic proteinase inhibitor pepstatin had an IC50 of 27 nM when tested in a dose-response study with the purified enzyme. The apparent Ki for pepstatin was 2.9 nM. Several synthetic inhibitors of the enzymes were identified with IC50s in the nanomolar range. The most potent compound, A70450, was characterized as a

fast, tight-binding inhibitor having an IC50 of 1.3 nM and apparent Ki of 0.17 nM.

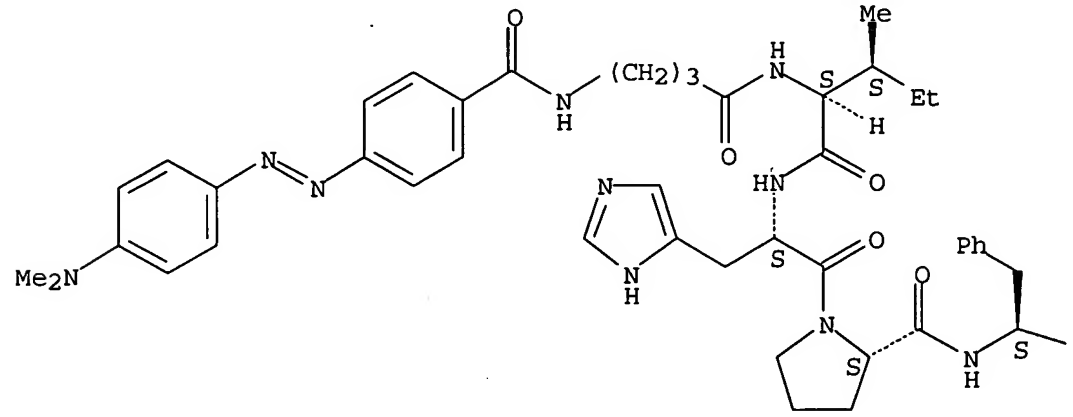
IT **142988-22-5**
RL: ANST (Analytical study)
(in aspartic proteinase of Candida albicans fluorimetric determination)

RN 142988-22-5 CAPLUS

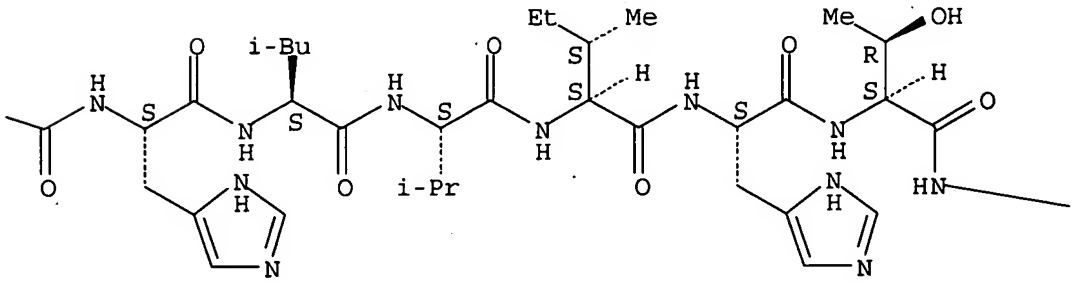
CN L-Threoninamide, N-[4-[[4-[[4-(dimethylamino)phenyl]azo]benzoyl]amino]-1-oxobutyl]-L-isoleucyl-L-histidyl-L-prolyl-L-phenylalanyl-L-histidyl-L-leucyl-L-valyl-L-isoleucyl-L-histidyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

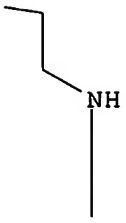
PAGE 1-A



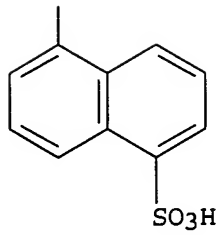
PAGE 1-B



PAGE 1-C



PAGE 2-C



L4 ANSWER 72 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:403159 CAPLUS
DN 117:3159
TI Substrate specificities of tissue kallikrein and T-kininogenase: their possible role in kininogen processing
AU Chagas, Jair R.; Hirata, Izaura Y.; Juliano, Maria A.; Xiong, William; Wang, Cindy; Chao, Julie; Juliano, Luiz; Prado, Eline S.
CS Dep. Biophys., Esc. Paul. Med., Sao Paulo, 04034, Brazil
SO Biochemistry (1992), 31(21), 4969-74
CODEN: BICHAW; ISSN: 0006-2960
DT Journal
LA English
AB The present studies demonstrate the importance of subsite interactions in determining the cleavage specificities of kallikrein gene family proteinases. The effect of substrate amino acid residues in positions P3-P'3 on the catalytic efficiency of tissue kallikreins (rat, pig, and horse) and T-kininogenase was studied using peptidyl-pNA (pNA = p-nitroanilide) and intramol. quenched fluorogenic peptides as substrates. Kinetic analyses show the different effects of D-amino acid residues at P3, Pro at P'2, and Arg at either P'1 or P'3 on the hydrolysis of substrates by tissue

kallikreins from rat and from horse or pig. T-kininogenase was shown to differ from tissue kallikrein in its interactions at subsites S2, S'1, and S'2. As a result of these differences, Abz-FRSR-EDDnp [(Abz = o-aminobenzoyl; EDDnp = N-(2,4-dinitrophenyl)ethylenediamine)] with Arg at P'2 is a good substrate for tissue kallikreins from horse, pig, and rat but not for T-kininogenase. Abz-FRRP-EDDnp and Abz-FRAPR-EDDnp with Pro at P'2 (rat high-mol.-weight kininogen sequence) are susceptible to rat tissue kallikrein but not to tissue kallikreins from horse and pig. Arg in P'3 increased the susceptibility of the Arg-Ala bond to rat tissue kallikrein. These data explain the release of bradykinin by rat tissue kallikrein and of kallidin by tissue kallikreins from other animal species. Abz-FRLV-EDDnp and Abz-FRLVR-EDDnp (T-kininogen sequence) are good substrates for T-kininogenase but not for tissue kallikrein. Arg at the leaving group (at either P'1, P'2, or P'3) lowers the Km values of T-kininogenase while Val and P'2 increases its kcat values. The results indicate that the enzyme subsites S'1, S'2, and S'3 are important determinants for the substrate specificity of tissue kallikreins and T-kininogenase. The findings are also in agreement with the known species specificity of tissue kallikreins and the resistance of rat T-kininogen to tissue kallikreins.

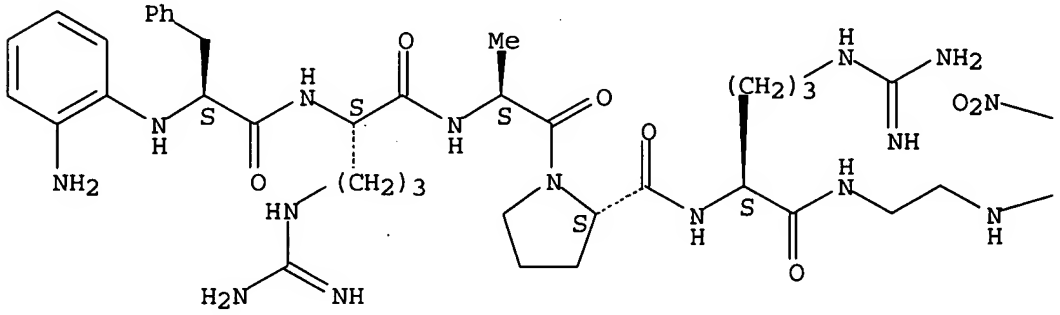
IT **141556-96-9**
RL: BIOL (Biological study)
(tissue kallikrein and T-kininogenase of mammal specificity for, reaction kinetics and structure relation to)

RN 141556-96-9 CAPLUS

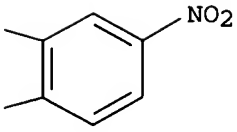
CN L-Argininamide, N-(2-aminophenyl)-L-phenylalanyl-L-arginyl-L-alanyl-L-prolyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L4 ANSWER 73 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:54319 CAPLUS
DN 116:54319

TI Characterization of recombinant human renin: kinetics, pH-stability, and peptidomimetic inhibitor binding

AU Holzman, Thomas F.; Chung, Christine C.; Edalji, Rohinton; Egan, David A.; Martin, Margaret; Gubbins, Earl J.; Krafft, Grant A.; Wang, Gary T.; Thomas, A. Mitchel; et al.

CS Pharm. Prod. Div., Abbott Lab., Abbott Park, IL, 60064, USA

SO Journal of Protein Chemistry (1991), 10(5), 553-63
CODEN: JPCHD2; ISSN: 0277-8033

DT Journal

LA English

AB The kinetic behavior and pH-stability of recombinant human renin was analyzed using a new fluorogenic substrate based on the normal P6-P3' renin cleavage sequence in human angiotensinogen. The design of this fluorogenic substrate makes possible, for the first time, direct monitoring of the kinetics of proteolytic conversion of prorenin to renin. The pH-stability profile for renin, measured with the substrate at 25°, indicated a broad plateau of stability between pH 6.0 and 10.0. Anal. of the pH-activity profile of renin for the substrate indicated a min. Km (.apprx.1.8 μM) at pH .apprx. 7.4 and a maximum Vm between pH 7.4 and 8.0. The thermodn. of the binding of a novel, soluble, peptidomimetic inhibitor to renin indicated it is possible to retain the tight-binding characteristics and enthalpy contributions to binding of larger peptide-derived inhibitors, while reducing inhibitor size and entropic contributions to binding. A novel derivative of the fluorogenic substrate, containing a 3-Me histidine substitution at the P2 site, was used to test the recent hypothesis that renin functions by virtue of substrate-directed catalysis.

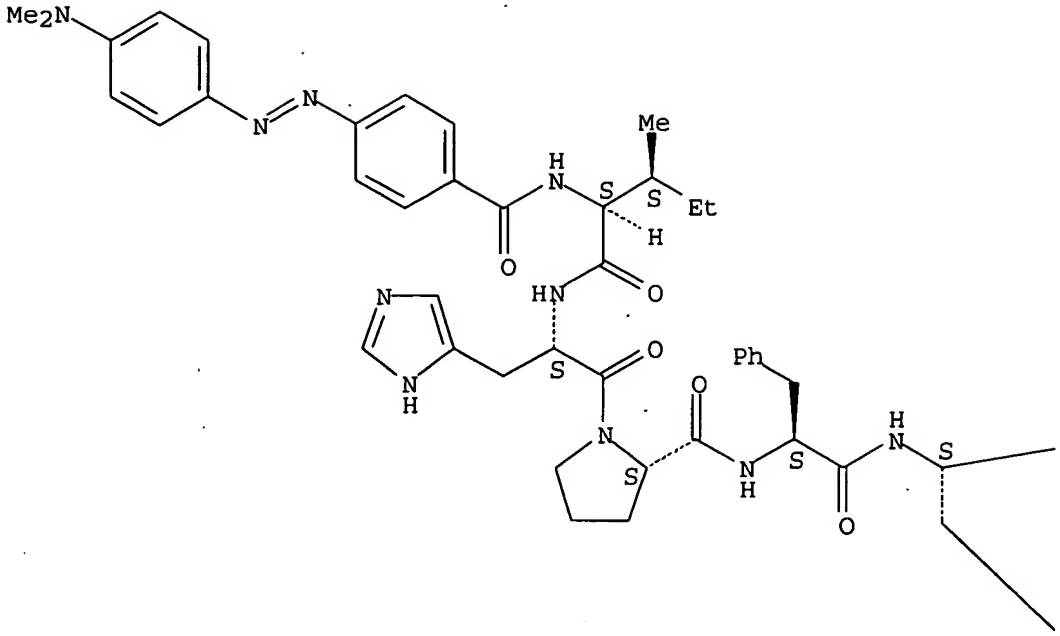
IT **138507-02-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with renin of human)

RN 138507-02-5 CAPLUS

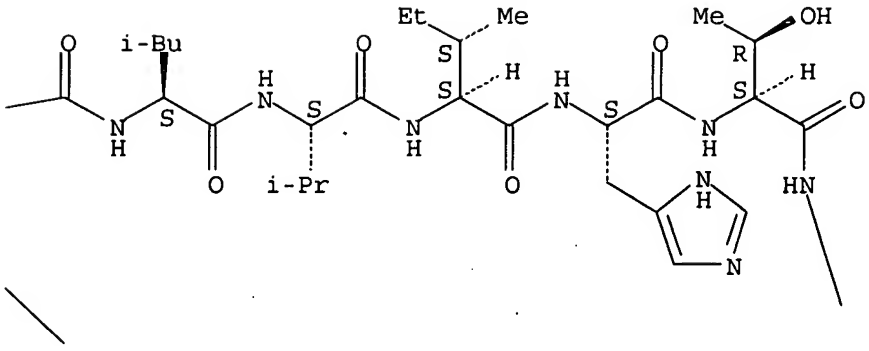
CN L-Threoninamide, N-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-isoleucyl-L-histidyl-L-prolyl-L-phenylalanyl-3-methyl-L-histidyl-L-leucyl-L-valyl-L-isoleucyl-L-histidyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A

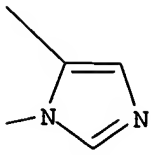


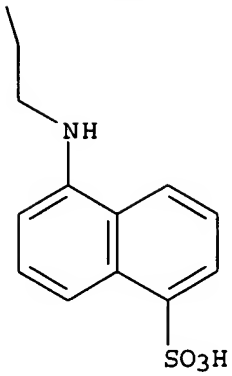
PAGE 1-B



PAGE 2-A

PAGE 2-B

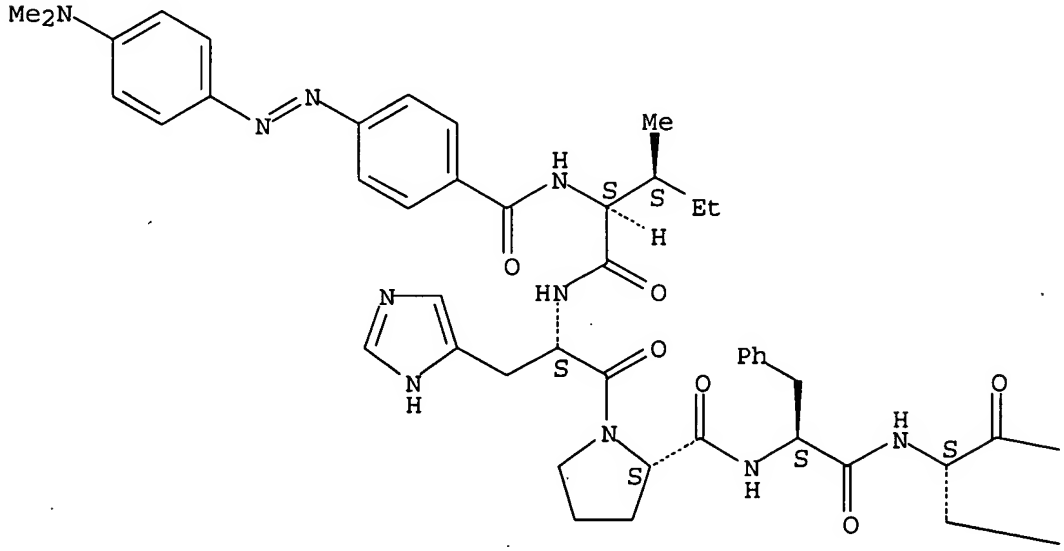




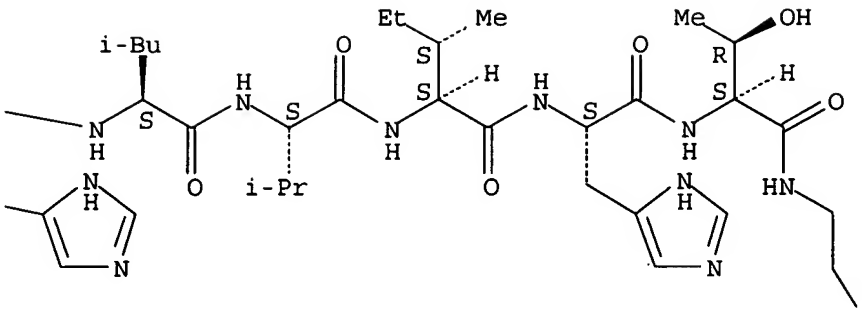
IT **137886-22-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with renin of human, kinetics of)
RN 137886-22-7 CAPLUS
CN L-Threoninamide, N-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-isoleucyl-L-histidyl-L-prolyl-L-phenylalanyl-L-histidyl-L-leucyl-L-valyl-L-isoleucyl-L-histidyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

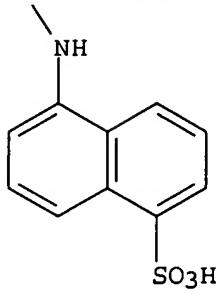
PAGE 1-A



PAGE 1-B



PAGE 2-B



L4 ANSWER 74 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:2609 CAPLUS
DN 116:2609
TI Active prorenin: evidence for the formation of a conformational variant of recombinant human prorenin
AU Edalji, Rohinton; Holzman, Thomas F.; Gubbins, Earl J.
CS Pharm. Prod. Div., Abbott Lab., Abbott Park, IL, 60064, USA
SO Journal of Protein Chemistry (1991), 10(4), 403-6
CODEN: JPCHD2; ISSN: 0277-8033
DT Journal
LA English
AB Using highly purified recombinant human prorenin, the 1st evidence for the formation of a stable, partially active, conformational variant (conformer) of the recombinant proenzyme is reported. The enzymically active prorenin exhibited the following characteristics: (1) the proenzyme N-terminal sequence and mol. weight were maintained; (2) the active proenzyme

was capable of cleaving a novel fluorogenic peptide substrate based on the sequence of human angiotensinogen and exhibited .apprx.30% of mature renin specific activity for the fluorogenic substrate; (3) the active proenzyme conformation bound to, and could be eluted from, a pepstatin affinity column; and (4) the activity of the active proenzyme could be inhibited by a novel peptidomimetic renin inhibitor.

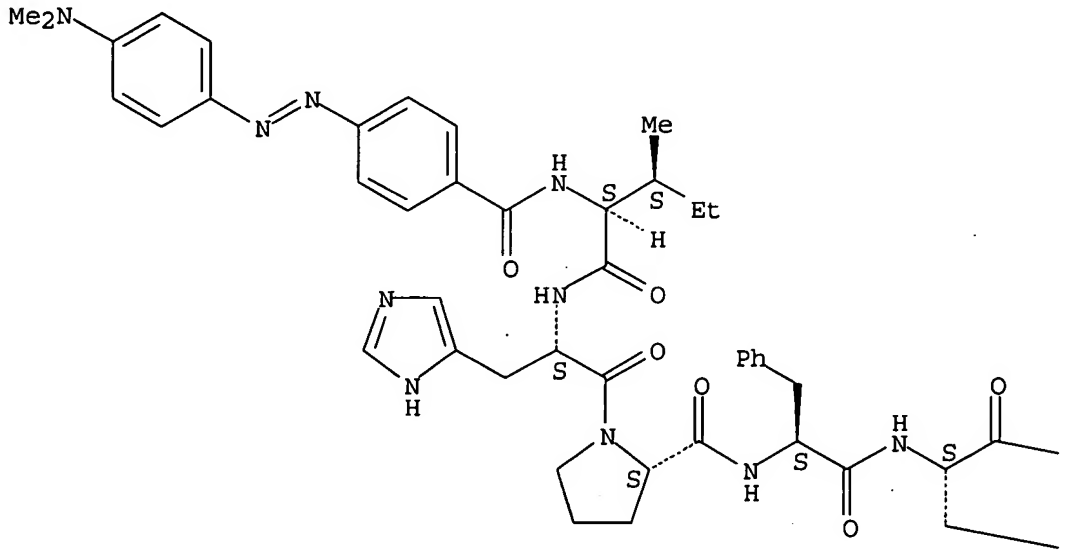
IT **137886-22-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cleavage of, by recombinant human prorenin conformer)

RN 137886-22-7 CAPLUS

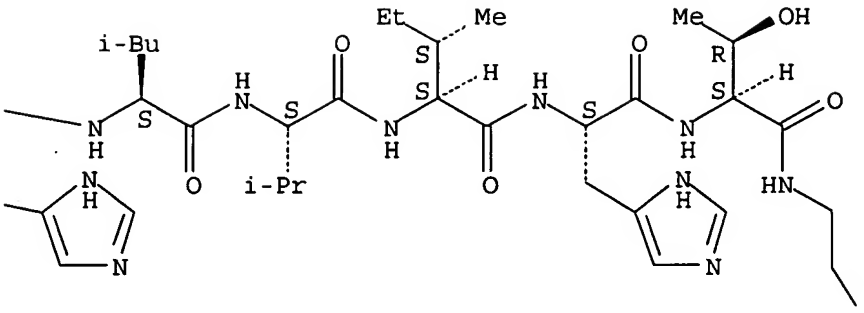
CN L-Threoninamide, N-[4-[[4-(dimethylamino)phenyl]azo]benzoyl]-L-isoleucyl-L-histidyl-L-prolyl-L-phenylalanyl-L-histidyl-L-leucyl-L-valyl-L-isoleucyl-L-histidyl-N-[2-[(5-sulfo-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

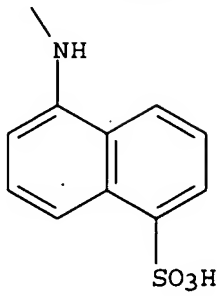
PAGE 1-A



PAGE 1-B



PAGE 2-B



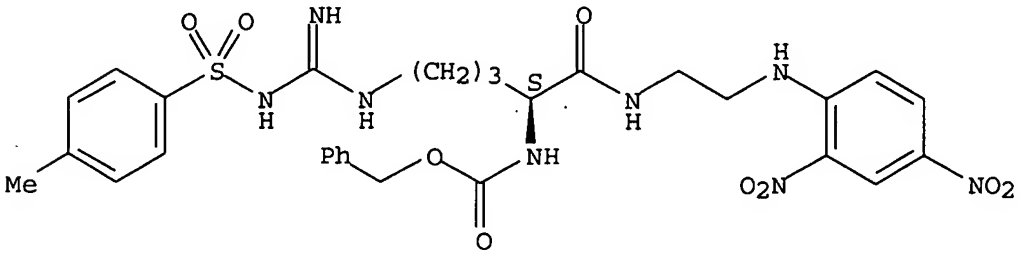
L4 ANSWER 75 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN .
AN 1991:224299 CAPLUS
DN 114:224299
TI Intramolecularly quenched fluorogenic tetrapeptide substrates for tissue and plasma kallikreins
AU Chagas, Jair R.; Juliano, Luiz; Prado, Eline S.
CS Dep. Biophys., Es. Paulista Med., Sao Paulo, 04034, Brazil
SO Analytical Biochemistry (1991), 192(2), 419-25
CODEN: ANBCA2; ISSN: 0003-2697
DT Journal
LA English
AB Five intramolecularly quenched fluorogenic substrates for arginyl hydrolases with the sequence Abz-Phe-Arg-X-Y--EDDnp (Abz = o-aminobenzoyl, EDDnp = ethylenediamine dinitrophenyl X = Arg or Ser; Y = Val, Pro, or Arg) were synthesized by classical solution methods. Kinetics of their hydrolysis by tissue and plasma kallikreins, trypsin, and thrombin characterized Abz-Phe-Arg-Ser-Arg-EDDnp as a specific and sensitive substrate for the continuous assay of tissue kallikreins while

Abz-Phe-Arg-Arg-Pro-EDDnp was the best substrate for human plasma kallikrein. The 5 peptides were poor substrates for trypsin and resistant to thrombin.

IT **133839-21-1P 133839-22-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)

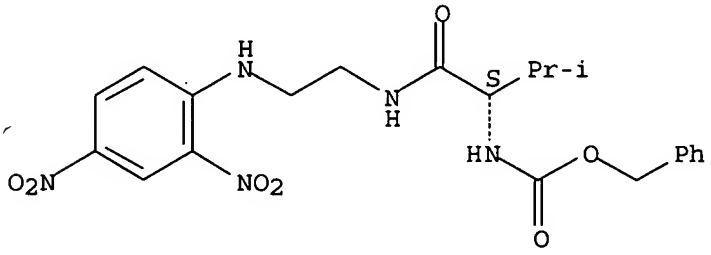
RN 133839-21-1 CAPLUS
CN Carbamic acid, [1-[[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]carbonyl]-4-[[imino[[(4-methylphenyl)sulfonyl]amino]methyl]amino]butyl]-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



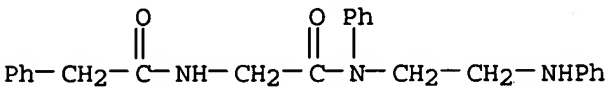
RN 133839-22-2 CAPLUS
CN Carbamic acid, [1-[[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]carbonyl]-2-methylpropyl]-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 76 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1989:553442 CAPLUS
DN 111:153442
TI Preparation of D-penicillamine. Reaction of penilloic acid, penicilloic acid α-amides and benzylpenicillin with N,N'-diphenylethylenediamine
AU Ogawa, Toshihisa; Tomisawa, Kazuyuki; Sota, Kaoru
CS Res. Cent., Taisho Pharm. Co., Ltd., Omiya, 330, Japan
SO Heterocycles (1988), 27(12), 2815-23
CODEN: HTCYAM; ISSN: 0385-5414
DT Journal
LA English
OS CASREACT 111:153442
AB Reaction of benzylpenilloic acid with PhNHCH2CH2NHPh in H2O-PhMe-AcOH under reflux yielded D-penicillamine (I). In a similar way, I was also obtained from penicilloic acid α-amides II (R = Ph, OPh; R1 = Ph, CH2Ph, CH2CH2Ph) and benzylpenicillin potassium salt. The structures of the byproducts formed in these reactions were also determined

IT **123017-56-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 123017-56-1 CAPLUS
CN Benzeneacetamide, N-[2-oxo-2-[phenyl[2-(phenylamino)ethyl]amino]ethyl]-
(9CI) (CA INDEX NAME)



L4 ANSWER 77 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1989:423951 CAPLUS
DN 111:23951
TI Preparation of antitumor amino acid and peptide derivatives of 1,4-bis[(aminoalkyl and hydroxyaminoalkyl)- amino]-5,8-dihydroxyanthraquinones
IN Fields, Thomas Lynn; Murdock, Keith Chadwick; Sassiver, Martin Leon; Upeslacis, Janis
PA American Cyanamid Co., USA
SO Eur. Pat. Appl., 73 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	EP 295316	A2	19881221	EP 1987-108677		19870616
	EP 295316	A3	19900314			
	EP 295316	B1	19951108			
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE					
				US 1986-874195		19860613
	US 4732970	A	19880322	US 1986-874195		19860613
	AT 130009	E	19951115	AT 1987-108677		19870616
				EP 1987-108677	A	19870616
	ES 2081797	T3	19960316	ES 1987-108677		19870616
				EP 1987-108677	A	19870616

PATENT FAMILY INFORMATION:
FAN 1988:406983

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	US 4732970	A	19880322	US 1986-874195		19860613
	CA 1298035	A1	19920324	CA 1987-539591		19870612
				US 1986-874195	A	19860613
	EP 295316	A2	19881221	EP 1987-108677		19870616
	EP 295316	A3	19900314			
	EP 295316	B1	19951108			
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE					
				US 1986-874195		19860613
	JP 01016753	A2	19890120	JP 1987-172118		19870711
	JP 2512482	B2	19960703			
				US 1986-874195		19860613

OS CASREACT 111:23951; MARPAT 111:23951
AB The title compds. [I; R = L-Rm-R3-R2-R4, where m = 1-10; Q = (CH2)n, CHMeCH2, CH2CHMe, CHMeCHMe, CHEtCH2, CH2CHEt, CHMeCH2CH2, CHCHMeCH2, CH2CH2CHMe, where n = 2-4; W = H, HOCH2CH2; L = H, PhCH2O2C, Me3CO2C, fluorenylmethoxycarbonyl; R1-Rm independently = D- or L-Cys, Leu, Ile,

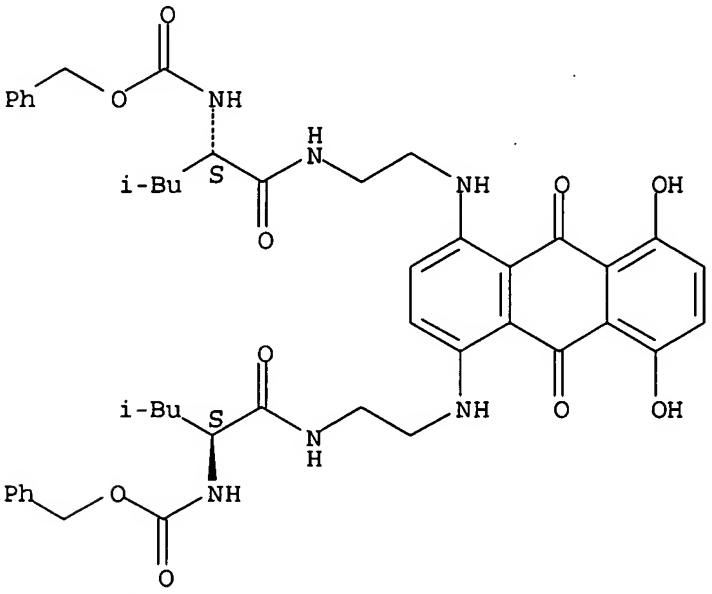
Phe, Tyr, Pro, Trp, Hp, Asp, Asn, Glu, Gln, Lys, Orn, Arg, His, Ala, Gly, Met, Val, Thr, or Ser optionally substituted at side-chain functionality by protecting groups on the CO2H, NH2, guanidinium, or SH such as alkyl, benzyl, 4-nitrobenzyl esters, PhCH2O2C, tert-BuO, etc.; X = a pharmacol. acceptable organic or inorg. acid-addition salt or combination of salts] (II) having antitumor activity, were prepared A solution of 2.72 g Me3SiCl in THF was added with stirring under cooling in an ice-MeOH bath to a slurry of 1.78 1,4-bis[(2-aminoethyl)amino]-5,8-dihydroxyanthraquinone-2HCl and 2.53 g Et3N in THF. The mixture was stirred in the ice bath for 40 min and then filtered. The filtrate was cooled in the ice-MeOH bath and a solution of 3.15 g N-tert-butoxycarbonyl-L-alanine N-hydroxysuccinimide ester in THF was added dropwise with stirring to give 584 mg I [RN(W)Q = BOC-Ala-NHCH2CH2, X = null] which (485 mg) was treated with dry HCl in AcOH and anisole to give 8 mg I [RN(W)Q = H-Ala-NHCH2CH2] (II). When administered at 1.5 mg/kg i.p. on days 1, 5, and 9, II extended the life span of mice transplanted with leukemia P388 with a ratio of survival time for treated/control animals of 477%.

IT **114725-97-2P 114725-99-4P 114726-00-0P**
114726-14-6P 114726-15-7P 114726-16-8P
114726-17-9P 114726-18-0P 114726-20-4P
114726-22-6P 114726-25-9P 114726-29-3P
114742-07-3P 114742-18-6P 114742-20-0P
114742-31-3P 114742-32-4P 114742-50-6P
114742-55-1P 114742-59-5P 114742-63-1P
114742-64-2P 114742-65-3P 114765-60-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as antitumor agent)

RN 114725-97-2 CAPLUS

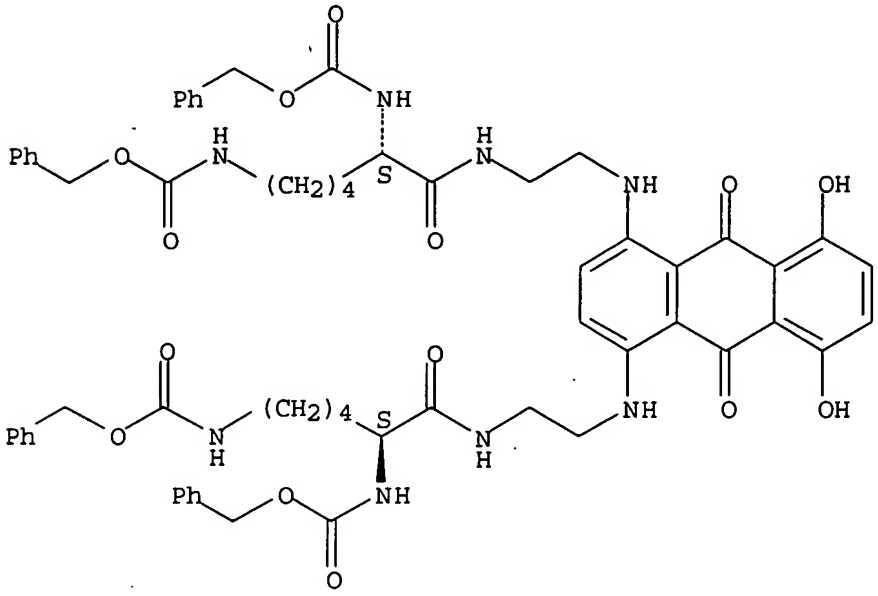
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[1-(2-methylpropyl)-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



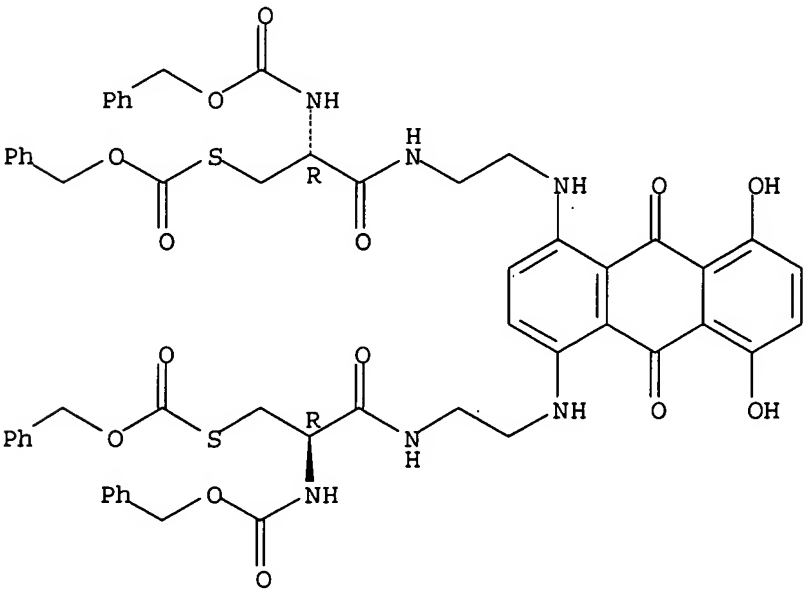
RN 114725-99-4 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino(1-oxo-1,2,6-hexanetriyl)]]tetrakis-, tetrakis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 114726-00-0 CAPLUS
CN Carbonothioic acid, S,S'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[3-oxo-2-[[(phenylmethoxy)carbonyl]amino]-3,1-propanediyl]]] O,O'-bis(phenylmethyl) ester, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

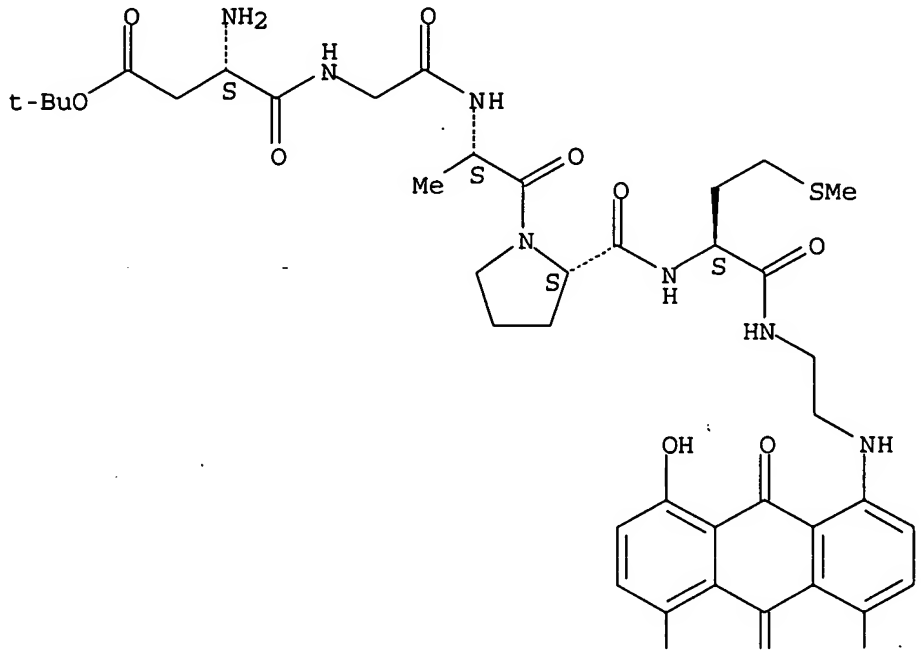
Absolute stereochemistry.



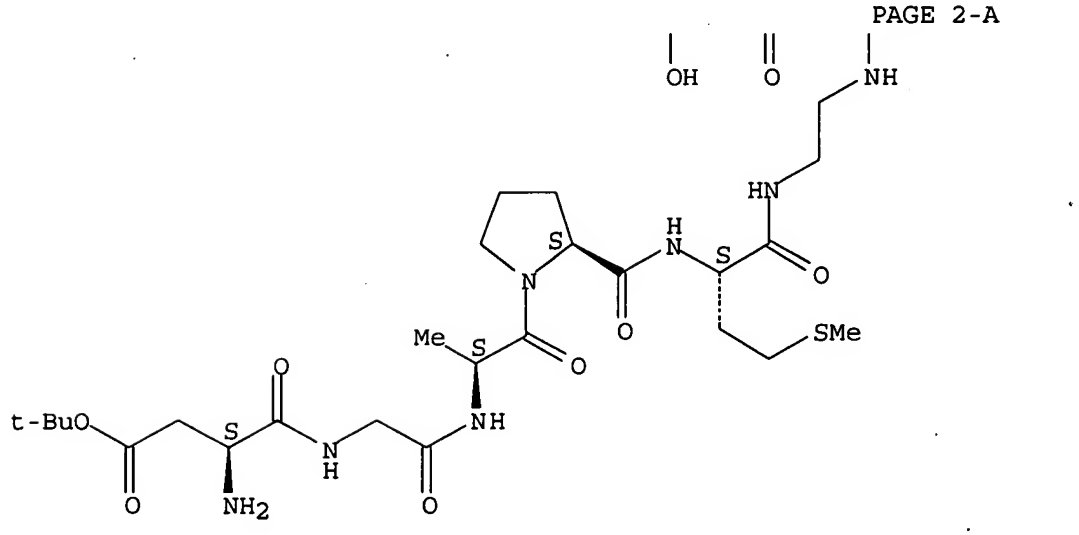
RN 114726-14-6 CAPLUS
CN L-Methioninamide, L-α-aspartylglycyl-L-alanyl-L-prolyl-N-[2-[[4-[[2-[[N-[1-[N-(N-L-α-aspartylglycyl)-L-alanyl]-L-prolyl]-L-methionyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



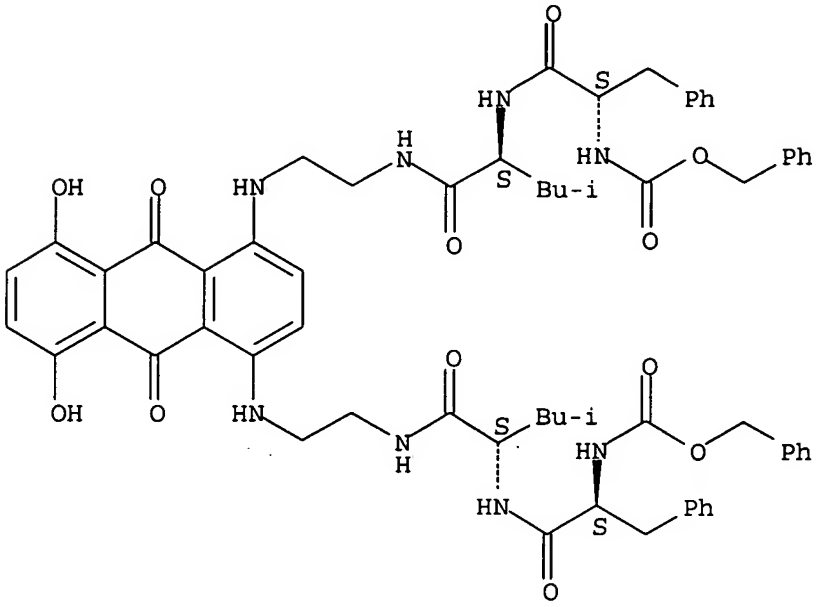
PAGE 2-A



RN 114726-15-7 CAPLUS
CN L-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-N-[2-[[9,10-

dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-[N-[(phenylmethoxy)carbonyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]-(9CI) (CA INDEX NAME)

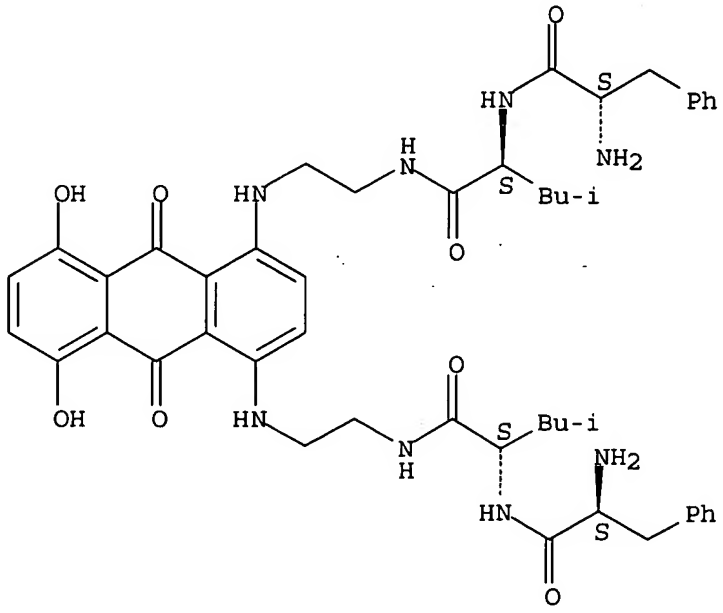
Absolute stereochemistry.



RN 114726-16-8 CAPLUS
CN L-Leucinamide, L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[(N-L-phenylalanyl-L-leucyl)amino]ethyl]amino]-1-anthracenyl]amino]ethyl]-, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

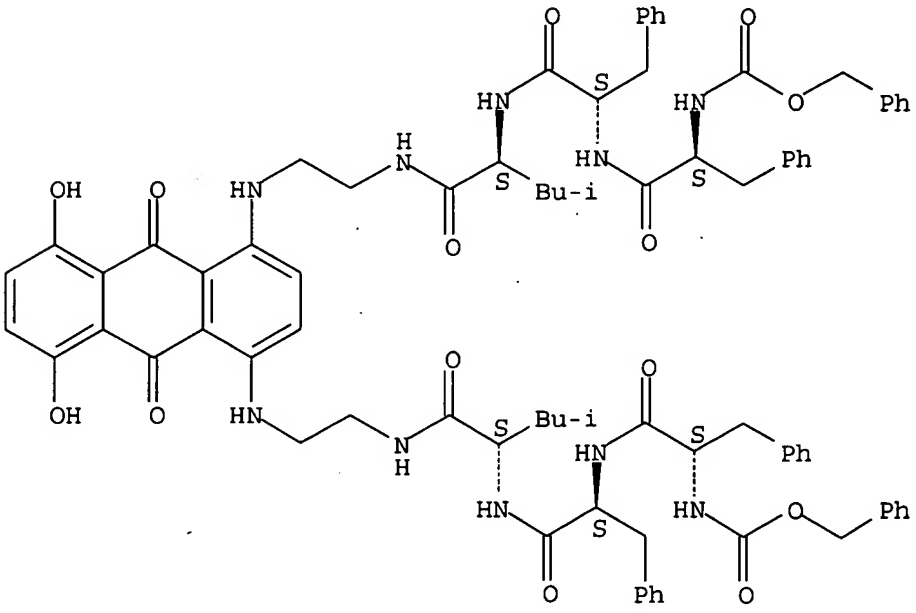
PAGE 1-A



●2 HBr

RN 114726-17-9 CAPLUS
CN L-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-[N-[N-[(phenylmethoxy)carbonyl]-L-phenylalanyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

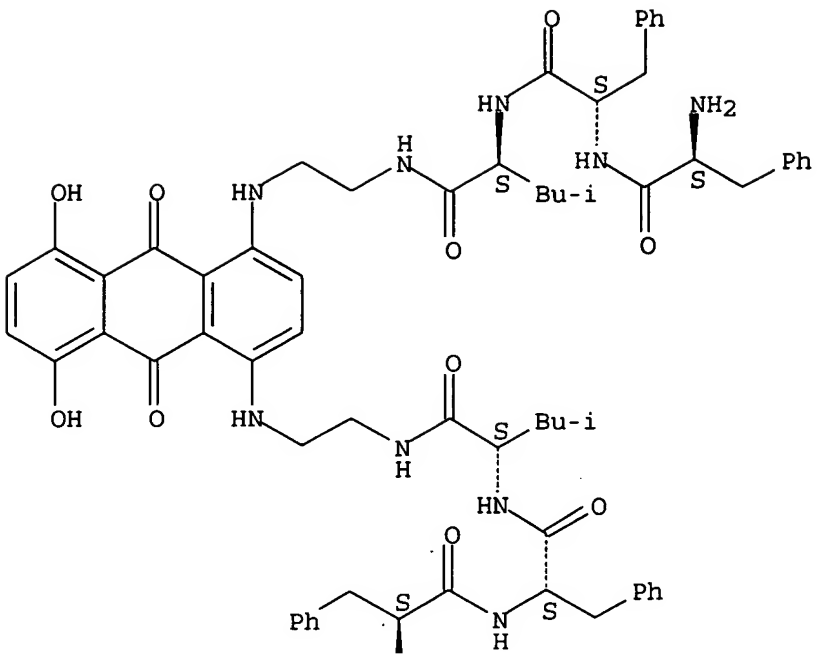
Absolute stereochemistry.



RN 114726-18-0 CAPLUS
CN L-Leucinamide, L-phenylalanyl-L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-(N-L-phenylalanyl-L-phenylalanyl)-L-leucyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]-, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



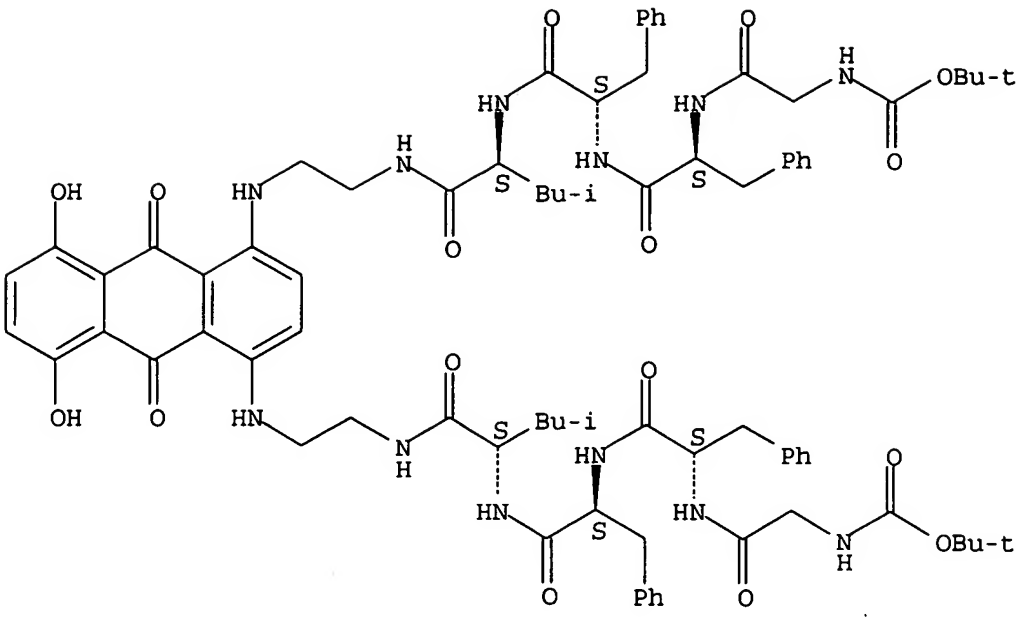
PAGE 2-A

● 2 HBr

RN 114726-20-4 CAPLUS

CN L-Leucinamide, N-[(1,1-dimethylethoxy)carbonyl]glycyl-L-phenylalanyl-L-phenylalanyl-N-[2-[[4-[[2-[[N-[N-[N-[(1,1-dimethylethoxy)carbonyl]glycyl]-L-phenylalanyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

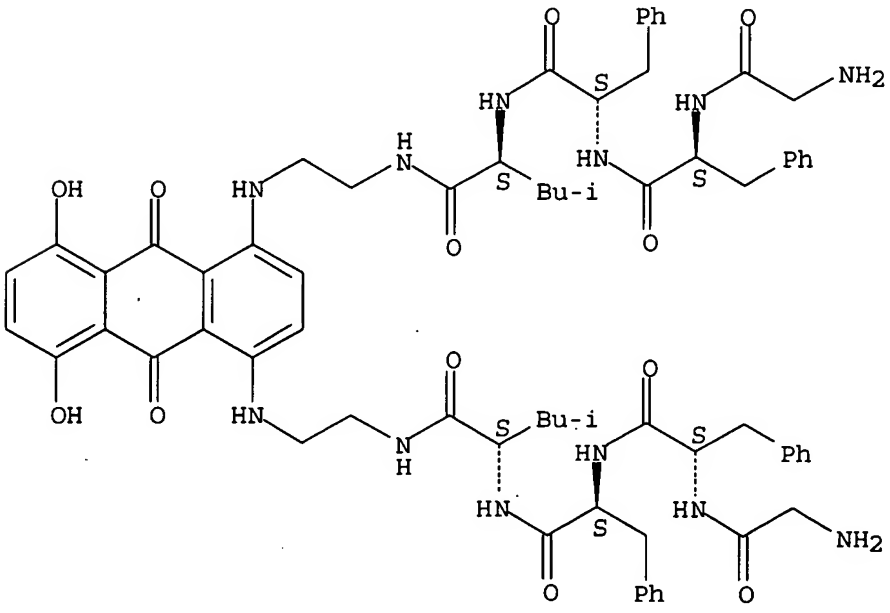


RN 114726-22-6 CAPLUS
CN L-Leucinamide, glycyl-L-phenylalanyl-L-phenylalanyl-N-[2-[[4-[[2-[[N-[N-(N-glycyl-L-phenylalanyl)-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

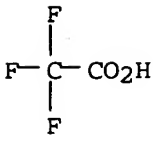
CRN 114726-21-5
CMF C70 H84 N12 O12

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



RN 114726-25-9 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediyl[(2-hydroxyethyl)imino][1-[2-(methylthio)ethyl]-2-oxo-2,1-ethanediyl]]]bis-, bis(9H-fluoren-9-ylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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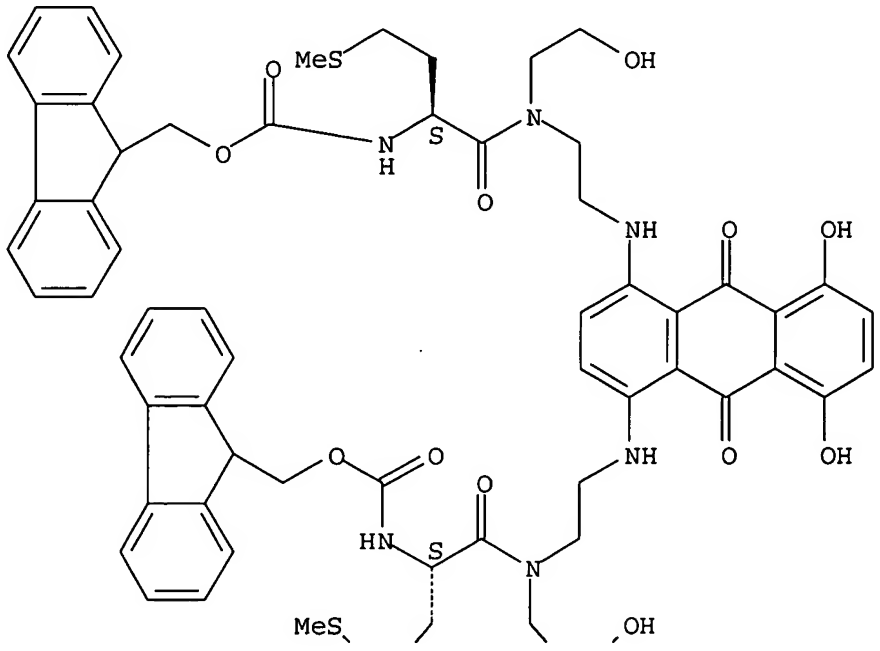

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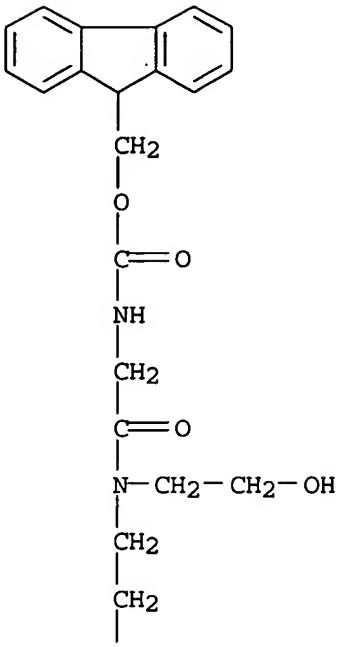
RN 114726-29-3 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediyl[(2-hydroxyethyl)imino](2-oxo-2,1-ethanediyl)]]bis-, bis(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



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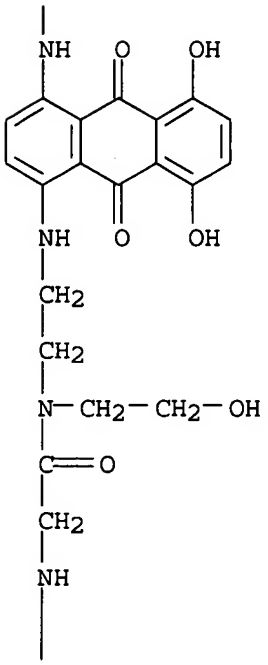

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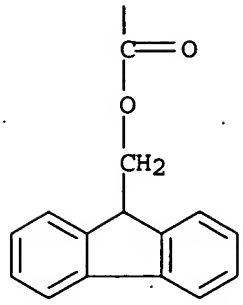
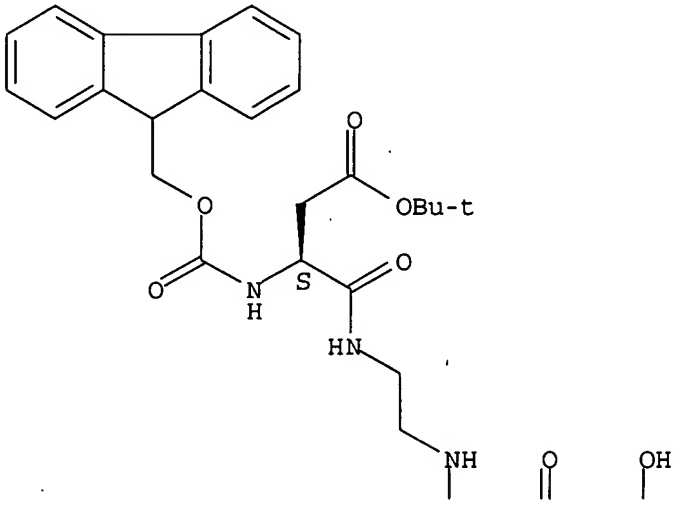


RN 114742-07-3 CAPLUS
CN Butanoic acid, 4,4'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis(imino-2,1-ethanediylimino)]bis[3-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-4-oxo-, bis(1,1-dimethylethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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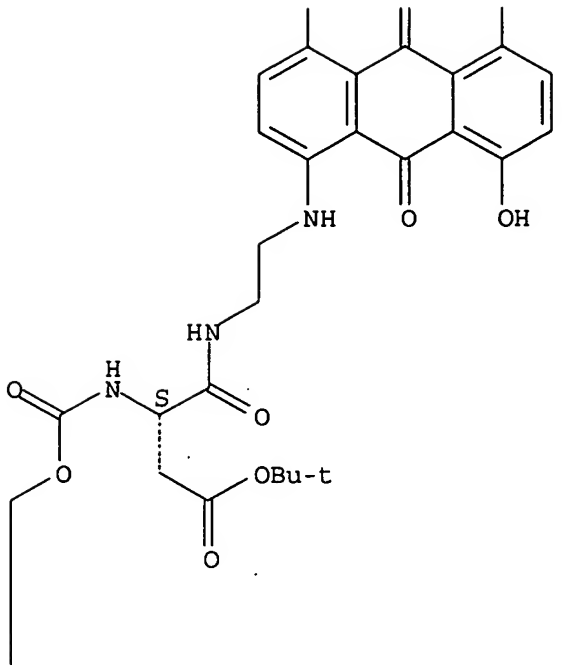
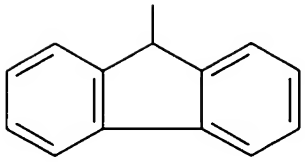
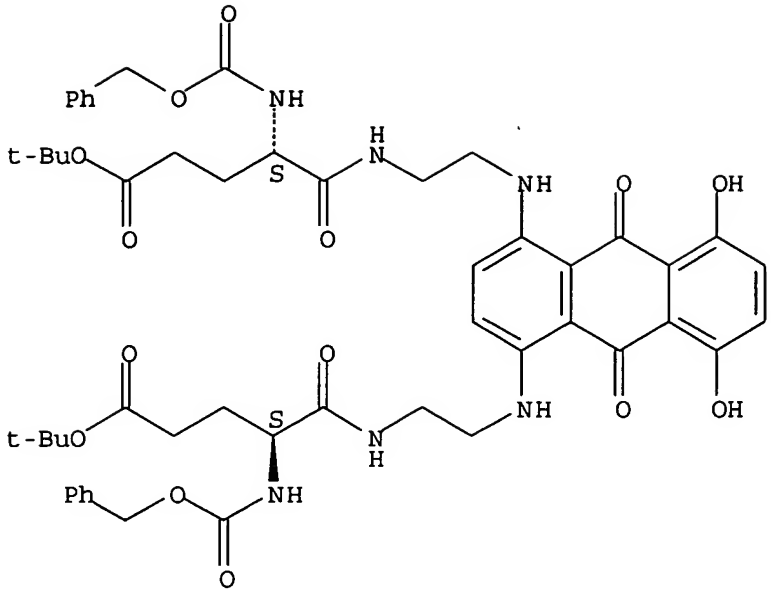


PAGE 3-A



RN 114742-18-6 CAPLUS
CN Pentanoic acid, 5,5'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis(imino-2,1-ethanediylimino)]bis[5-oxo-4-[[(phenylmethoxy)carbonyl]amino]-, bis(1,1-dimethylethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

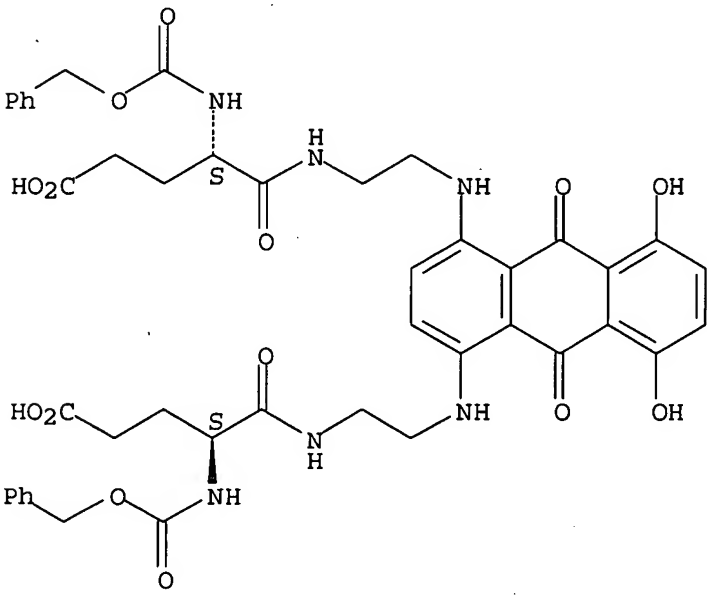


RN 114742-20-0 CAPLUS
CN Pentanoic acid, 5,5'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis(imino-2,1-ethanediylimino)]bis[5-oxo-4-[[(phenylmethoxy)carbonyl]amino]-, [S-(R*,R*)]-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

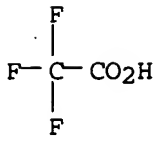
CRN 114742-19-7
CMF C44 H46 N6 O14

Absolute stereochemistry.



CM 2

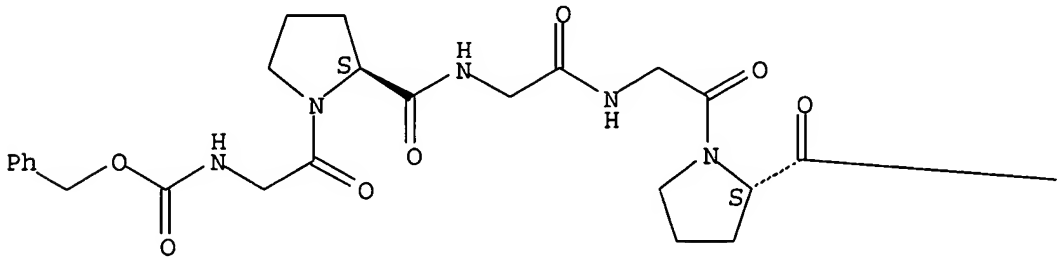
CRN 76-05-1
CMF C2 H F3 O2



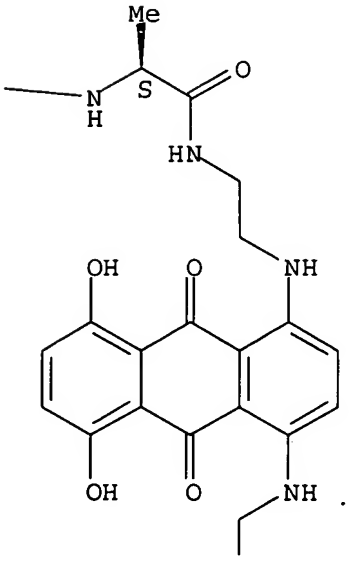
RN 114742-31-3 CAPLUS
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]glycyl-L-prolylglycylglycyl-L-prolyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-[1-[N-[N-[1-[N-[(phenylmethoxy)carbonyl]glycyl]-L-prolyl]glycyl]glycyl]-L-prolyl]-L-alanyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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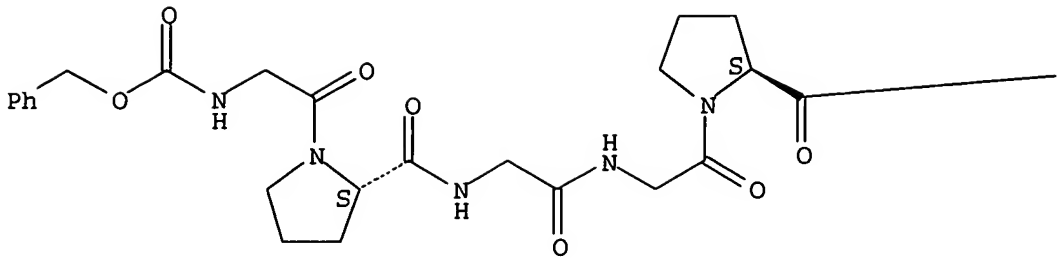

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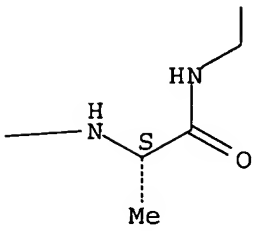
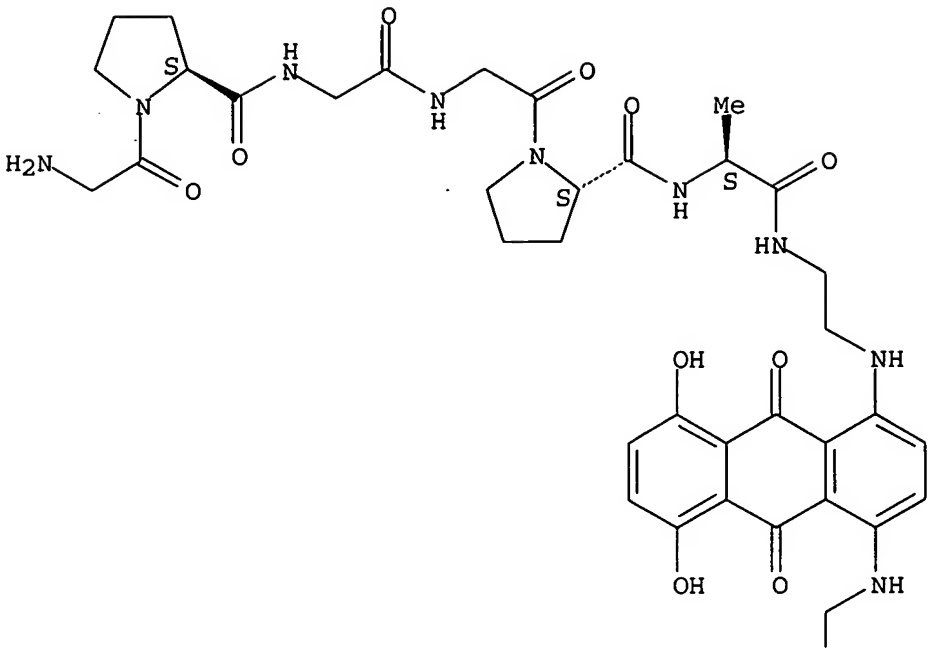


RN 114742-32-4 CAPLUS
CN L-Alaninamide, glycyl-L-prolylglycylglycyl-L-prolyl-N-[2-[[4-[[2-[[N-[1-[N-[N-(1-glycyl-L-prolyl)glycyl]glycyl]-L-prolyl]-L-alanyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]-, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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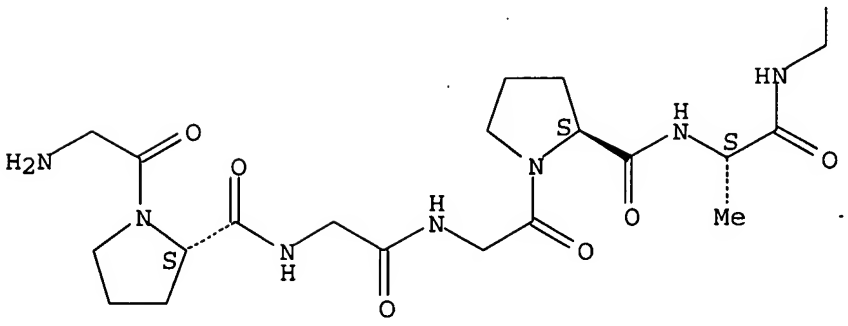
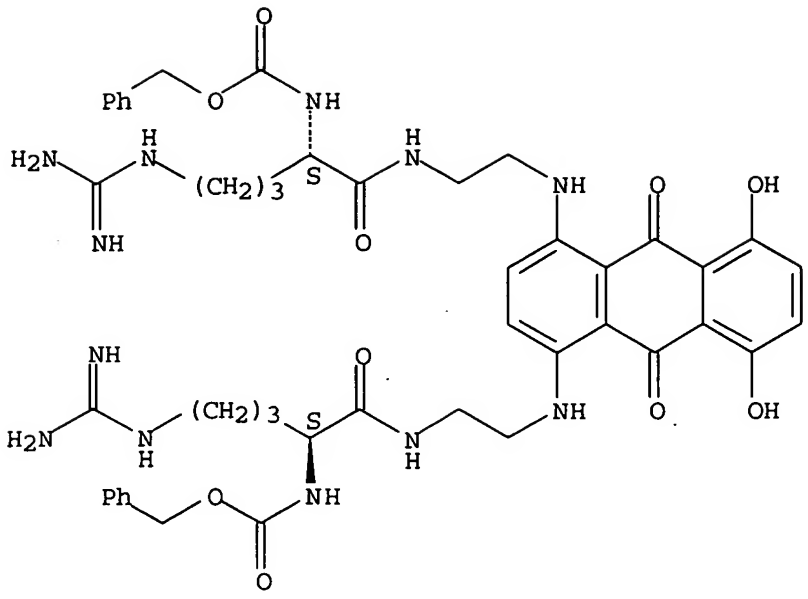


● 2 HBr

RN 114742-50-6 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[1-[3-[(aminoiminomethyl)amino]propyl]-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, dihydrobromide, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

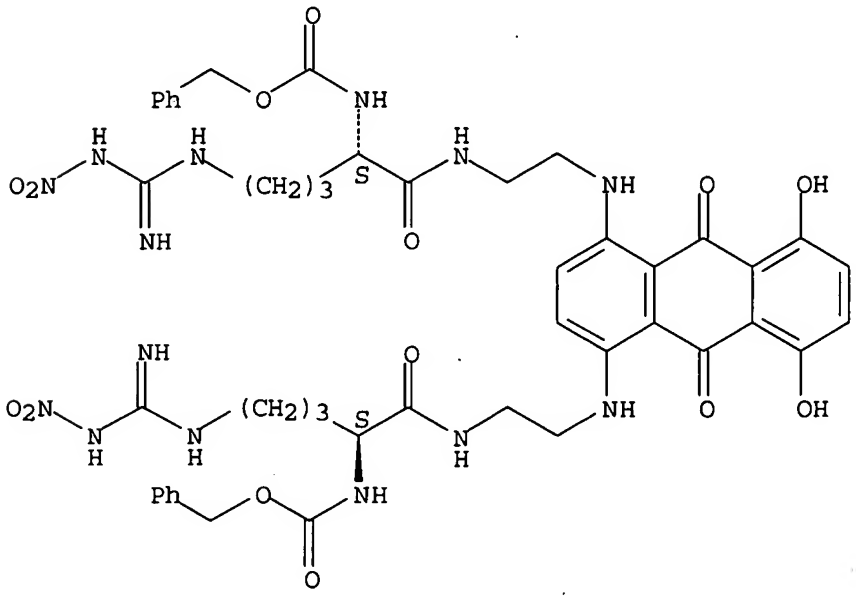


PAGE 2-A

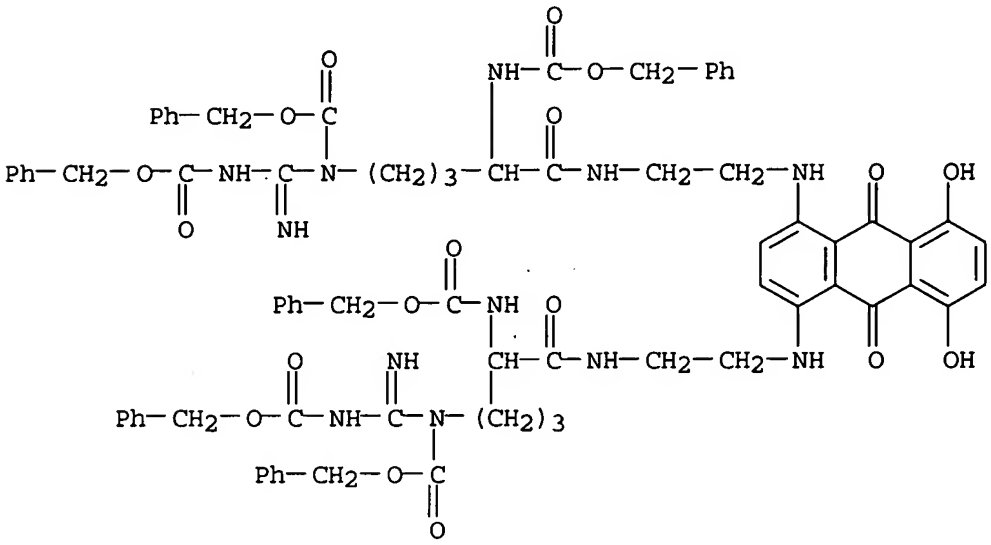
●2 HBr

RN 114742-55-1 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[1-[3-[[imino(nitroamino)methyl]amino]propyl]-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



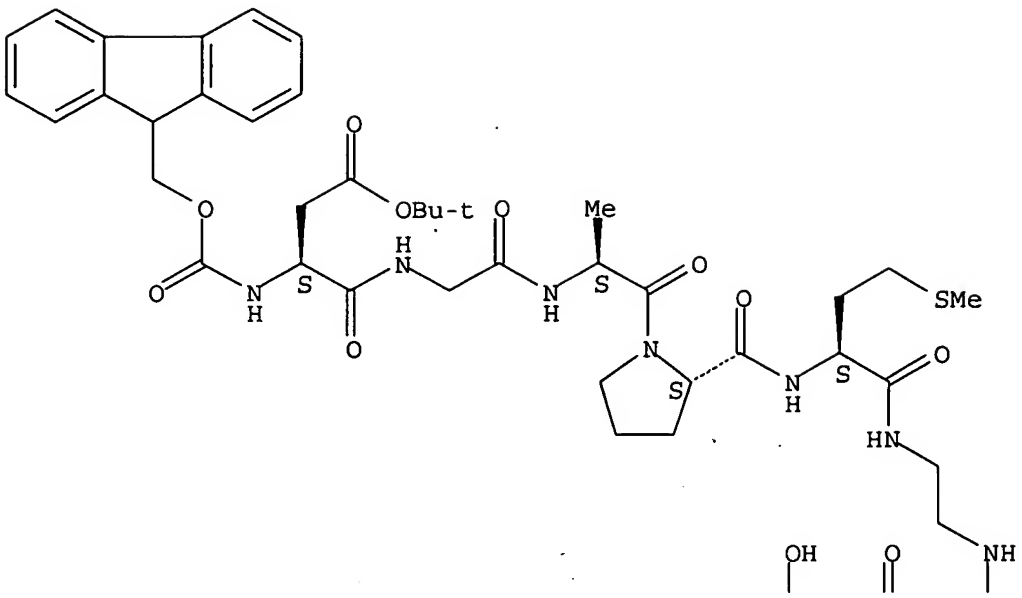
RN 114742-59-5 CAPLUS
CN 2-Oxa-4,6,11-triazadodecan-12-oic acid, 10,10'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis(imino-2,1-ethanediyliminocarbonyl)]bis[5-imino-3-oxo-1-phenyl-6-[(phenylmethoxy)carbonyl]-, bis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)



RN 114742-63-1 CAPLUS
CN L-Methioninamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-α-aspartylglycyl-L-alanyl-L-prolyl-N-[2-[[4-[[2-[[N-[1-[N-[N-[N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-α-aspartyl]glycyl]-L-alanyl]-L-prolyl]-L-methionyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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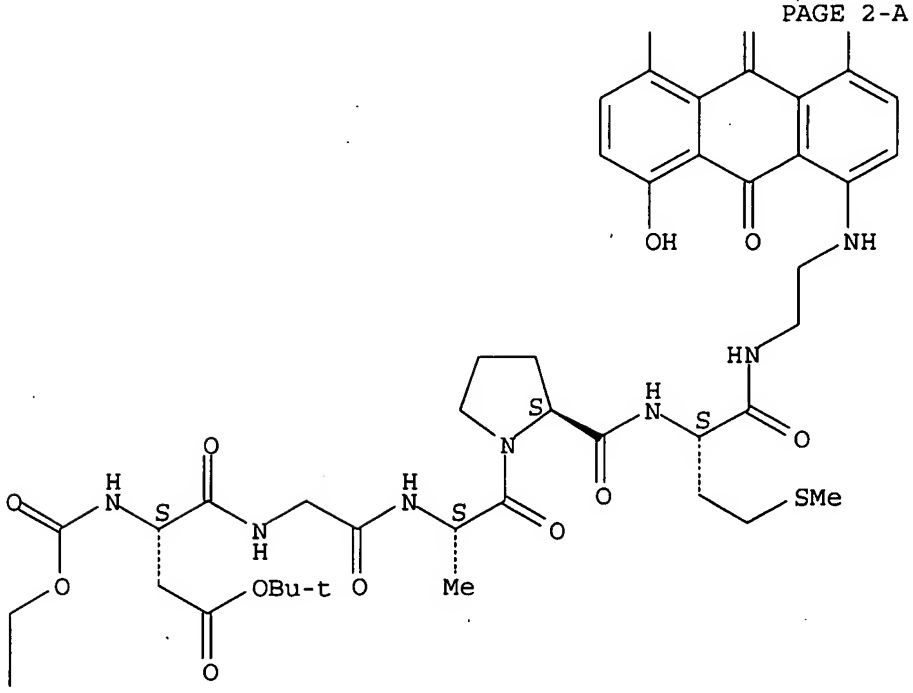
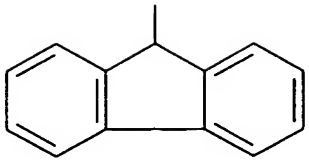


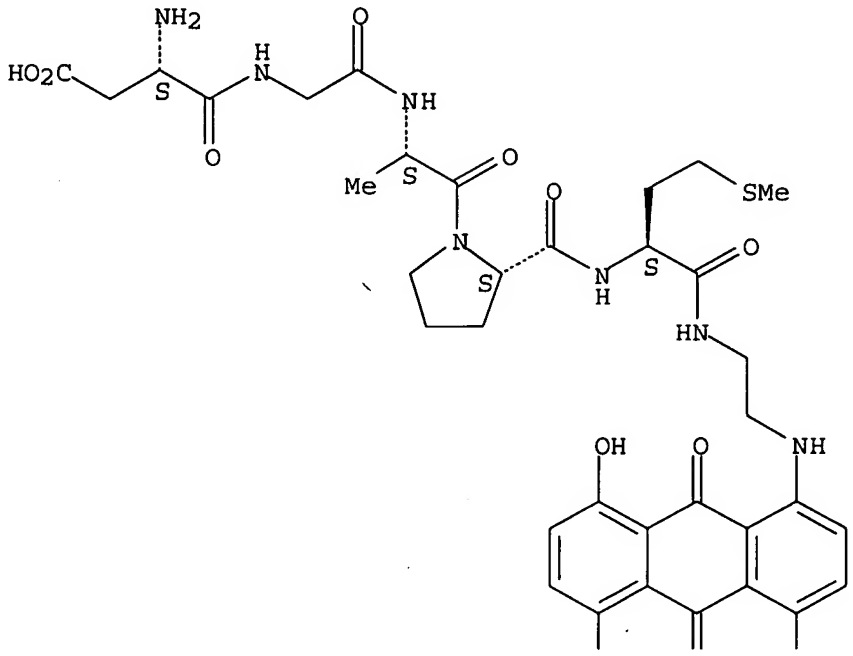
PAGE 3-A



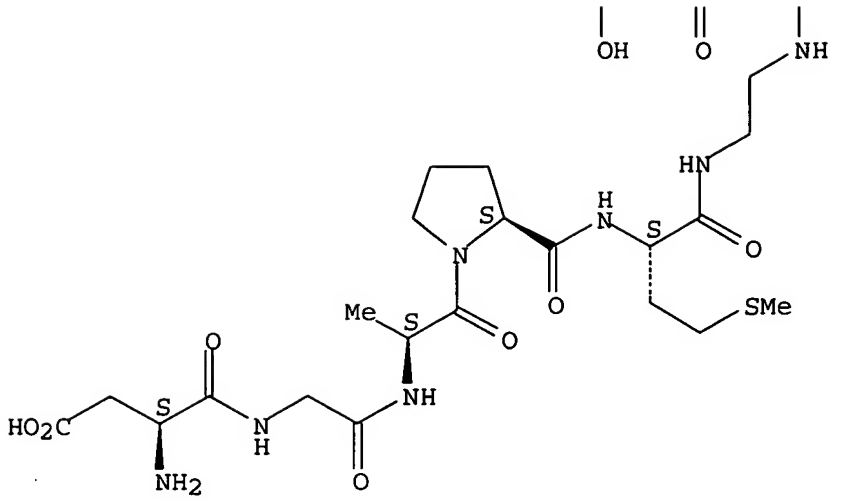
RN 114742-64-2 CAPLUS
CN L-Methioninamide, L-α-aspartylglycyl-L-alanyl-L-prolyl-N-[2-[[4-[[2-[[N-[1-[N-(N-L-α-aspartylglycyl)-L-alanyl]-L-prolyl]-L-methionyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

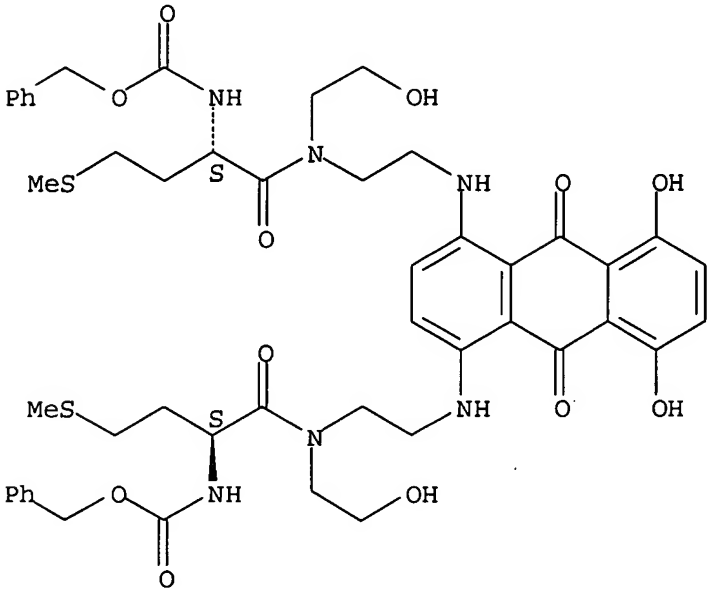


PAGE 2-A



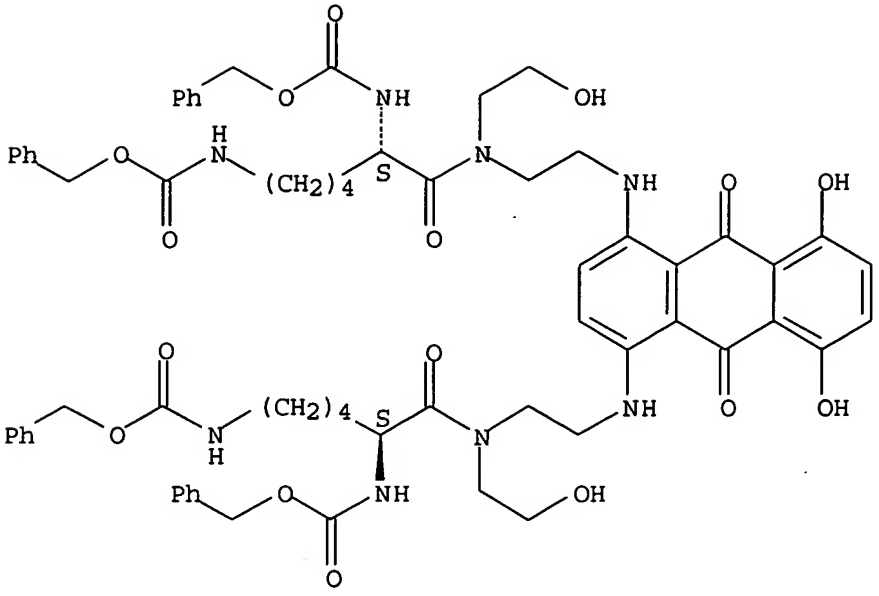
RN 114742-65-3 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediyl[(2-hydroxyethyl)imino][1-[2-(methylthio)ethyl]-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 114765-60-5 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediyl[(2-hydroxyethyl)imino](1-oxo-1,2,6-hexanetriyl)]]tetrakis-, tetrakis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 78 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1988:406983 CAPLUS
DN 109:6983
TI Preparation and testing of antitumor amino acid and peptide derivatives of 1,4-bis[(hydroxy-aminoalkyl)amino]-5,8-dihydroxyanthraquinones
IN Fields, Thomas L.; Murdock, Keith C.; Sassiver, Martin L.; Upeslacis, Janis
PA American Cyanamid Co., USA
SO U.S., 27 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
PI	US 4732970	A	19880322	US 1986-874195		19860613
	CA 1298035	A1	19920324	CA 1987-539591		19870612
				US 1986-874195	A	19860613
	EP 295316	A2	19881221	EP 1987-108677		19870616
	EP 295316	A3	19900314			
	EP 295316	B1	19951108			
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE					
				US 1986-874195		19860613
	JP 01016753	A2	19890120	JP 1987-172118		19870711
	JP 2512482	B2	19960703			
				US 1986-874195		19860613

PATENT FAMILY INFORMATION:
FAN 1989:423951

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 295316	A2	19881221	EP 1987-108677	19870616
	EP 295316	A3	19900314		
	EP 295316	B1	19951108		
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	US 4732970	A	19880322	US 1986-874195	19860613

AT 130009	E	19951115	AT 1987-108677		19870616
			EP 1987-108677	A	19870616
ES 2081797	T3	19960316	ES 1987-108677		19870616
			EP 1987-108677	A	19870616

OS CASREACT 109:6983; MARPAT 109:6983

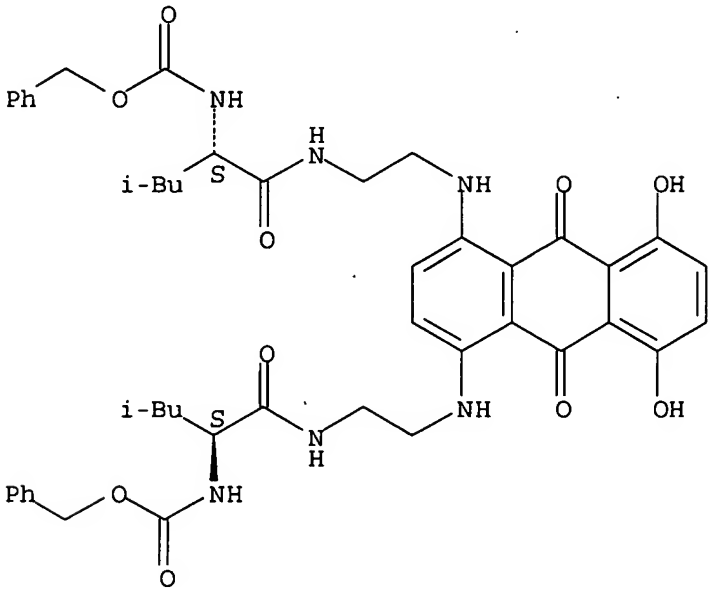
AB The title compds. [I; R = (protected) D- or L-Cys, Leu, Ile, Phe, Tyr, Pro, Trp, hydroxyprolyl, Asp, Asn, Glu, Gln, Lys, Orn, Arg, His, Ala, Gly, Met, Val, Thr, Ser; W = H, β-hydroxyethyl; L = H, CBZ, BOC, FMOC (CBZ = benzyloxycarbonyl, BOC = tert-butoxycarbonyl, FMOC = fluorenylmethoxycarbonyl); m = 1-10] were prepared as neoplasm inhibitors. 1,4-Bis[(2-aminoethyl)amino]-5,8-dihydroxyanthraquinone-2HCl, Et3N, and Me3SiCl were stirred in THF for 40 min. The filtrate was treated with tert-butoxycarbonylalanine hydroxysuccinimide ester at ice temperature and the mixture was stirred 24 h to give S-(R,R)-N,N'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino(1-methyl-2-oxo-2,1-ethanediyl)]bis[carbamic acid] bis(1,1-dimethylethyl) ester. In mice infected with P388 leukemia 0.75 mg I/kg i.p. increased survival time to up to 230% of controls.

IT **114725-97-2P 114725-99-4P 114726-00-0P**
114726-14-6P 114726-15-7P 114726-16-8P
114726-17-9P 114726-18-0P 114726-20-4P
114726-22-6P 114726-25-9P 114726-29-3P
114742-07-3P 114742-18-6P 114742-20-0P
114742-31-3P 114742-32-4P 114742-50-6P
114742-55-1P 114742-59-5P 114742-63-1P
114742-64-2P 114742-65-3P 114765-60-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as neoplasm inhibitor)

RN 114725-97-2 CAPLUS

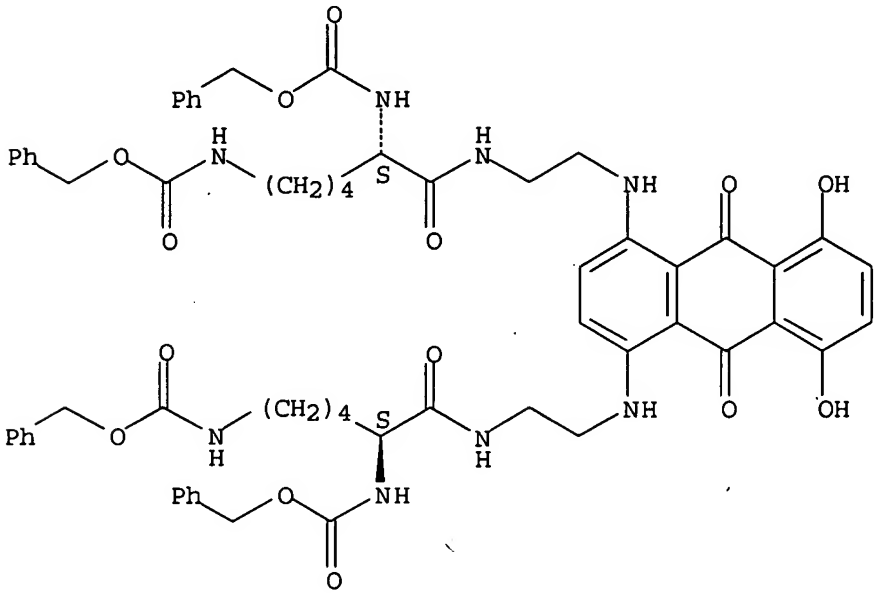
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[1-(2-methylpropyl)-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



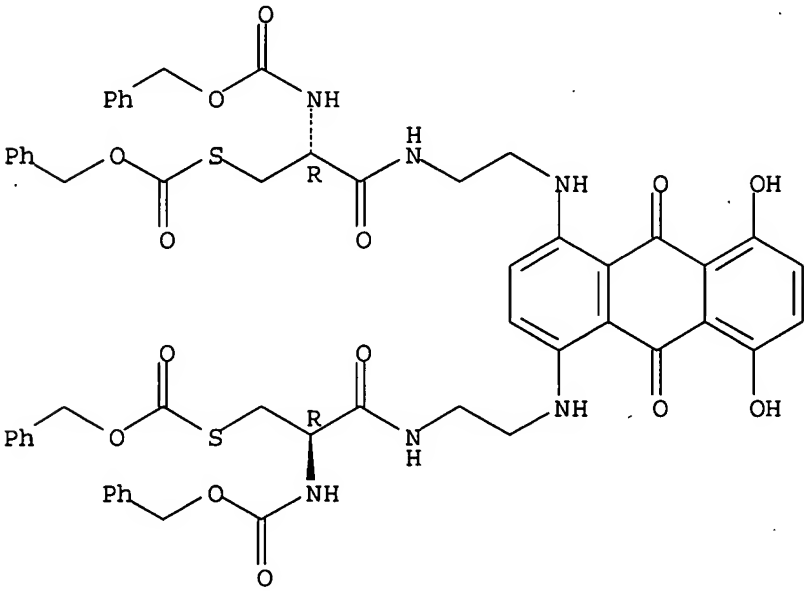
RN 114725-99-4 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino(1-oxo-1,2,6-hexanetriyl)]]tetrakis-, tetrakis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 114726-00-0 CAPLUS
CN Carbonothioic acid, S,S'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[3-oxo-2-[[(phenylmethoxy)carbonyl]amino]-3,1-propanediyl]]] O,O'-bis(phenylmethyl) ester, [R-(R*,R*)]- (9CI) (CA INDEX NAME)

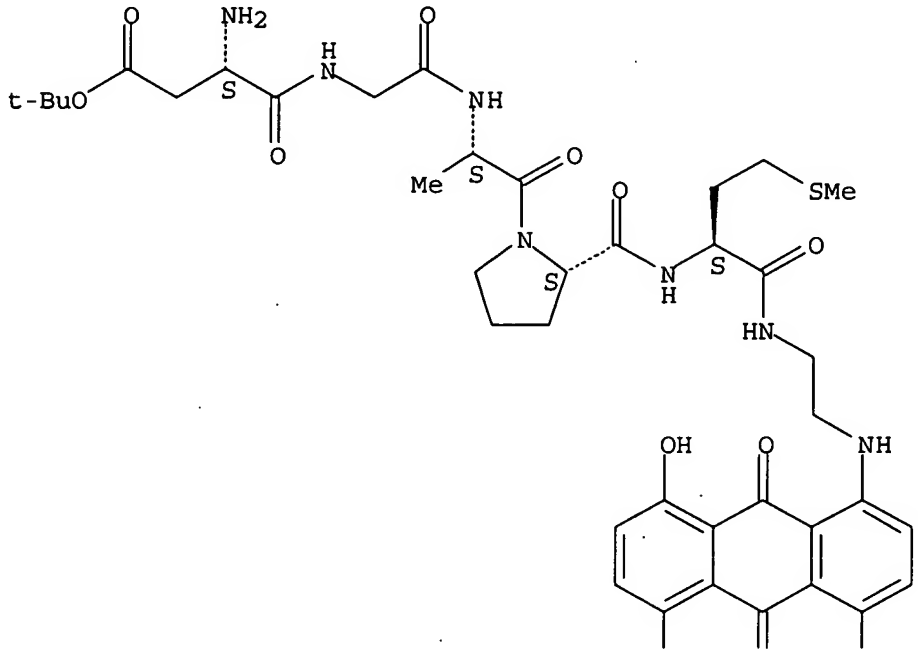
Absolute stereochemistry.



RN 114726-14-6 CAPLUS
CN L-Methioninamide, L-α-aspartylglycyl-L-alanyl-L-prolyl-N-[2-[[4-[[2-[[N-[1-[N-(N-L-α-aspartylglycyl)-L-alanyl]-L-prolyl]-L-methionyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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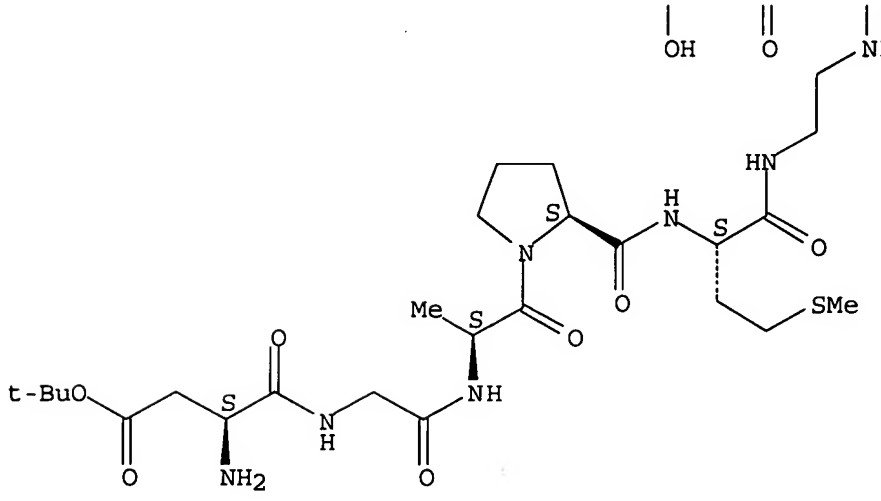
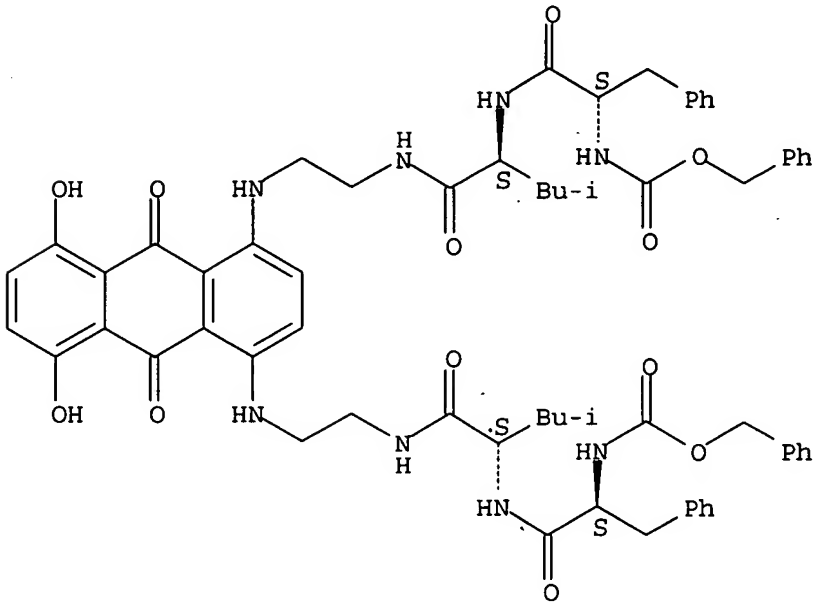


RN 114726-15-7 CAPLUS
CN L-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-N-[2-[[9,10-

dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-[N-[(phenylmethoxy)carbonyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]-(9CI) (CA INDEX NAME)

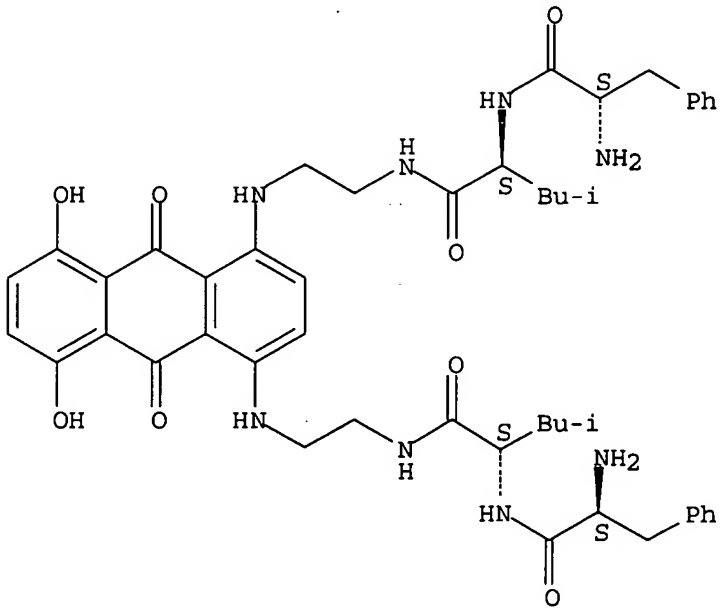
Absolute stereochemistry.



RN 114726-16-8 CAPLUS
CN L-Leucinamide, L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[(N-L-phenylalanyl-L-leucyl)amino]ethyl]amino]-1-anthracenyl]amino]ethyl]-, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

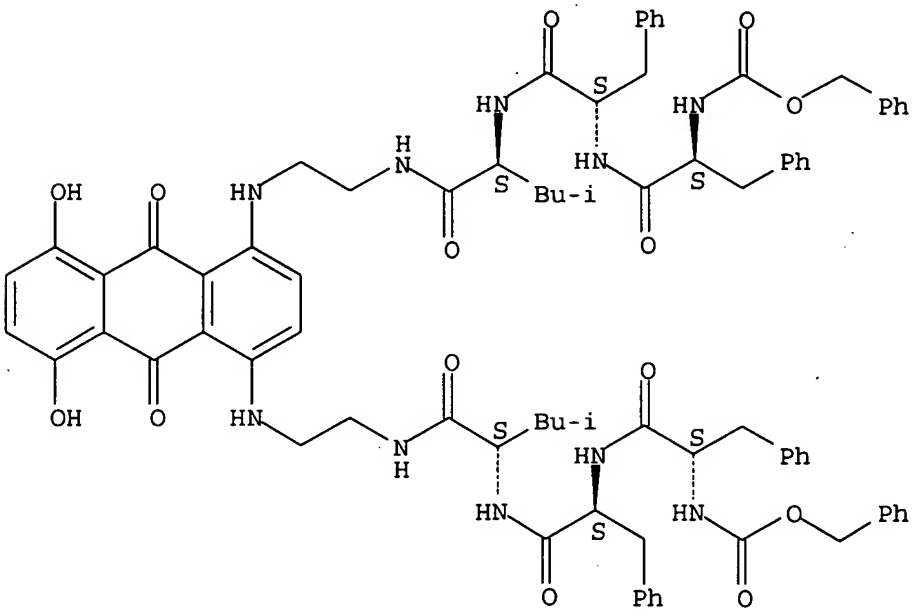
PAGE 1-A



●2 HBr

RN 114726-17-9 CAPLUS
CN L-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-[N-[N-[(phenylmethoxy)carbonyl]-L-phenylalanyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

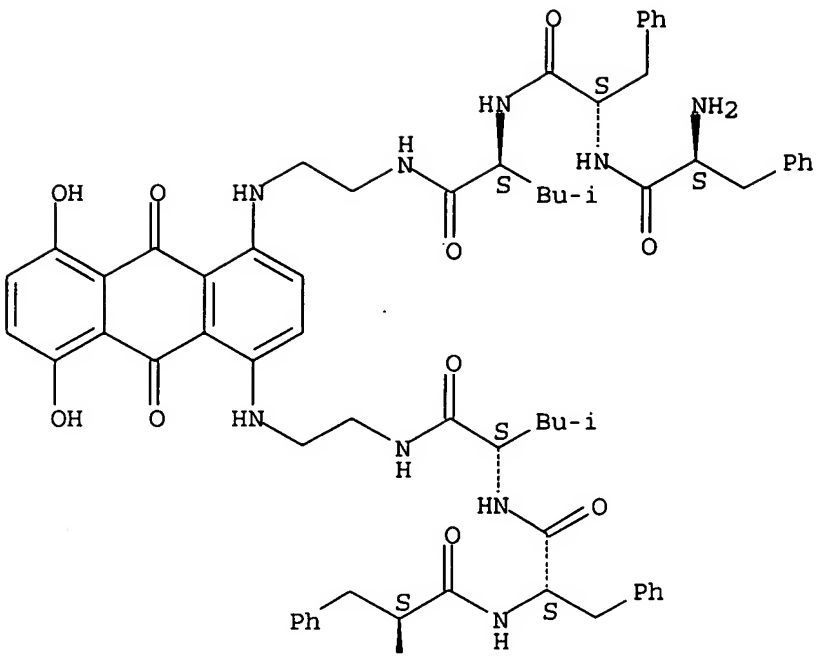
Absolute stereochemistry.



RN 114726-18-0 CAPLUS
CN L-Leucinamide, L-phenylalanyl-L-phenylalanyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-(N-L-phenylalanyl-L-phenylalanyl)-L-leucyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]-, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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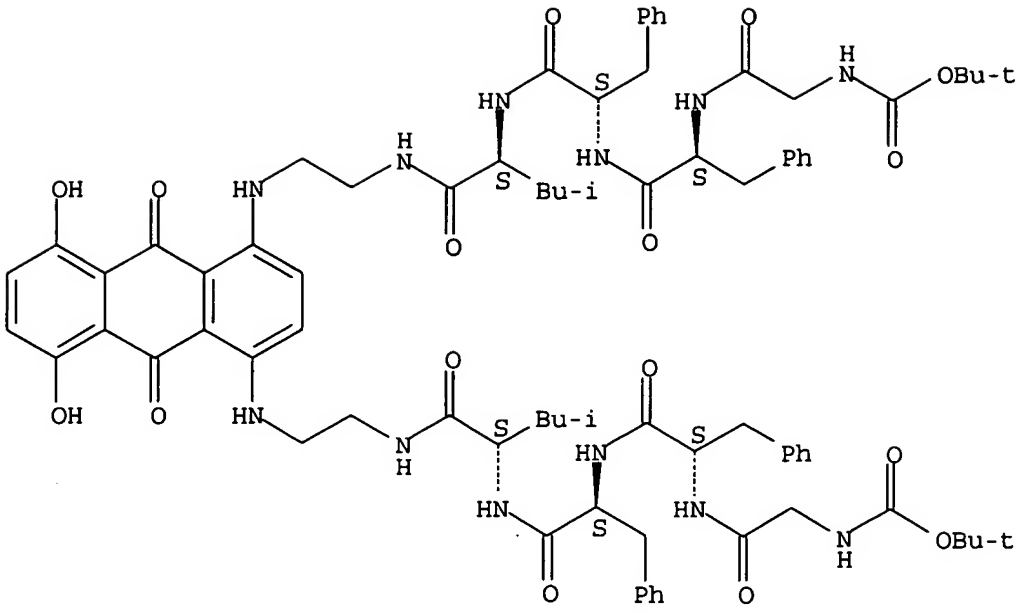
●2 HBr

RN 114726-20-4 CAPLUS

CN L-Leucinamide, N-[(1,1-dimethylethoxy)carbonyl]glycyl-L-phenylalanyl-L-phenylalanyl-N-[2-[[4-[[2-[[N-[N-[N-[(1,1-dimethylethoxy)carbonyl]glycyl]-L-phenylalanyl]-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

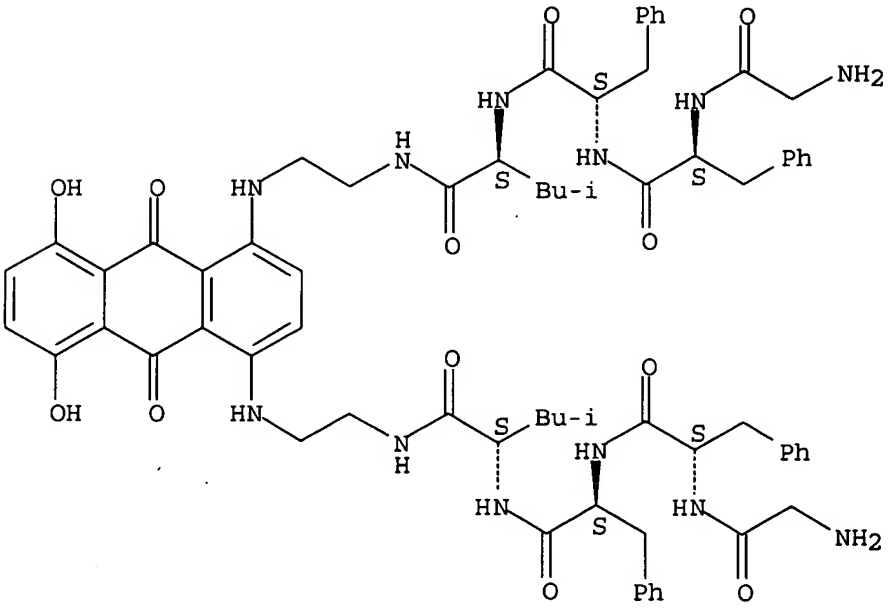


RN 114726-22-6 CAPLUS
CN L-Leucinamide, glycyl-L-phenylalanyl-L-phenylalanyl-N-[2-[[4-[[2-[[N-[N-(N-glycyl-L-phenylalanyl)-L-phenylalanyl]-L-leucyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

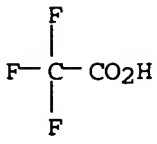
CRN 114726-21-5
CMF C70 H84 N12 O12

Absolute stereochemistry.



CM 2

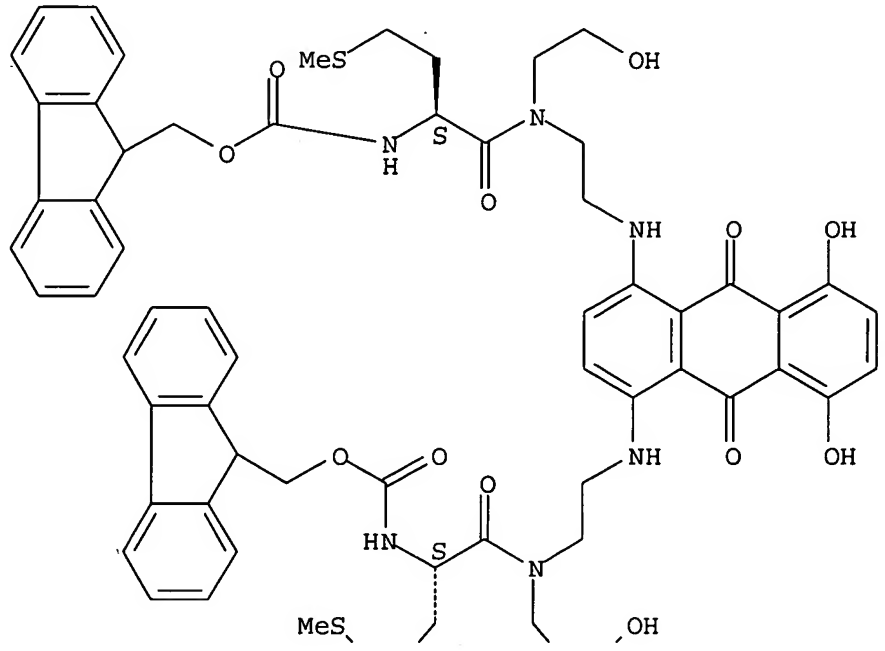
CRN 76-05-1
CMF C2 H F3 O2



RN 114726-25-9 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediyl[(2-hydroxyethyl)imino][1-[2-(methylthio)ethyl]-2-oxo-2,1-ethanediyl]]]bis-, bis(9H-fluoren-9-ylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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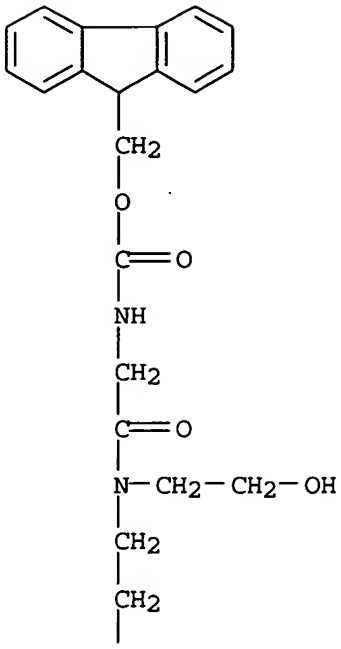
RN 114726-29-3 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediyl[(2-hydroxyethyl)imino](2-oxo-2,1-ethanediyl)]]bis-, bis(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A



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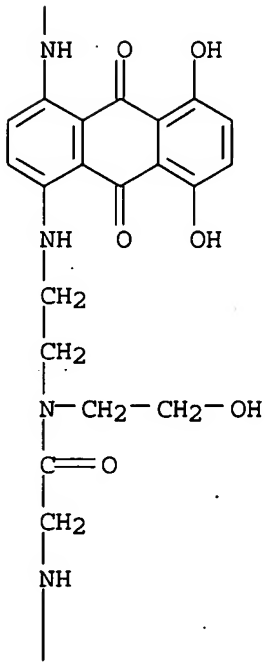

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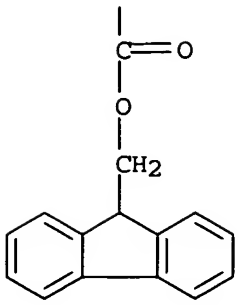
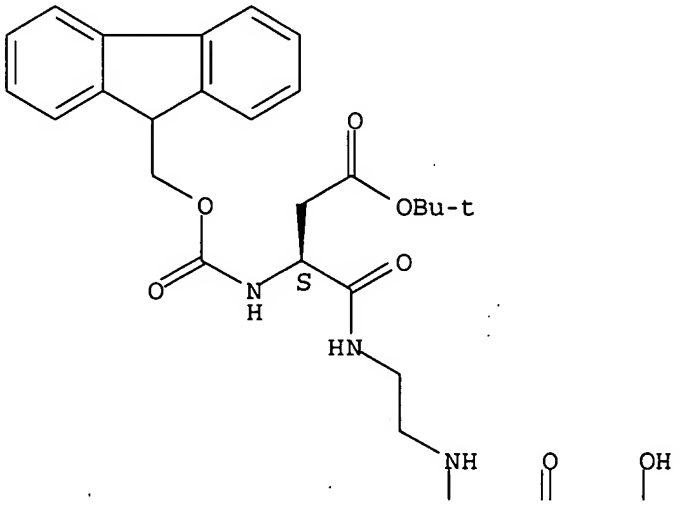


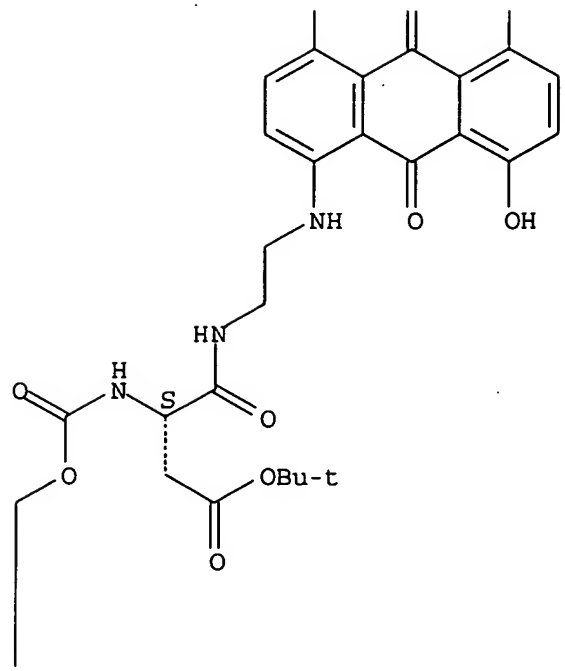
RN 114742-07-3 CAPLUS
CN Butanoic acid, 4,4'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis(imino-2,1-ethanediylimino)]bis[3-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-4-oxo-, bis(1,1-dimethylethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

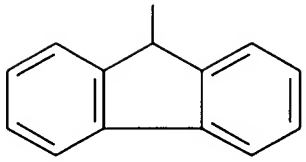
PAGE 1-A



PAGE 2-A

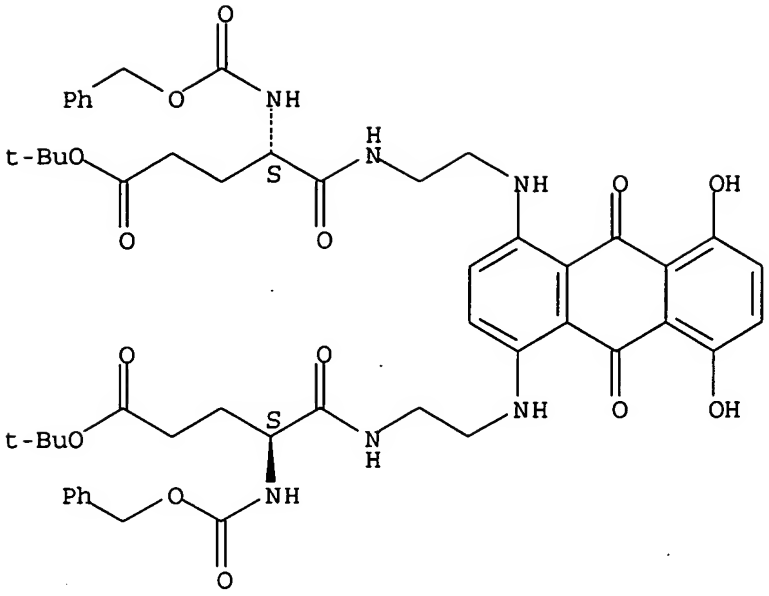


PAGE 3-A



RN 114742-18-6 CAPLUS
CN Pentanoic acid, 5,5'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis(imino-2,1-ethanediylimino)]bis[5-oxo-4-[[(phenylmethoxy)carbonyl]amino]-, bis(1,1-dimethylethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

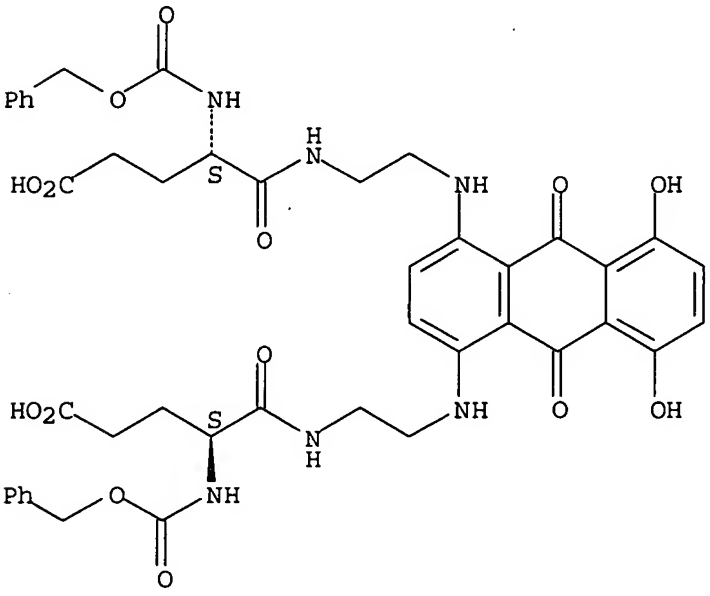


RN 114742-20-0 CAPLUS
CN Pentanoic acid, 5,5'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis(imino-2,1-ethanediylimino)]bis[5-oxo-4-[[(phenylmethoxy)carbonyl]amino]-, [S-(R*,R*)]-, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

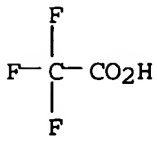
CRN 114742-19-7
CMF C44 H46 N6 O14

Absolute stereochemistry.



CM 2

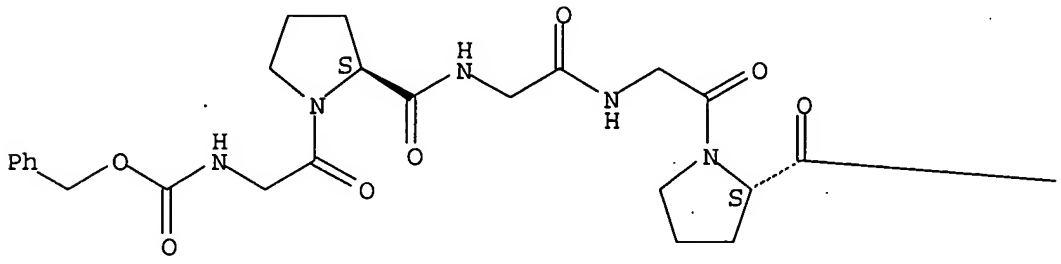
CRN 76-05-1
CMF C2 H F3 O2



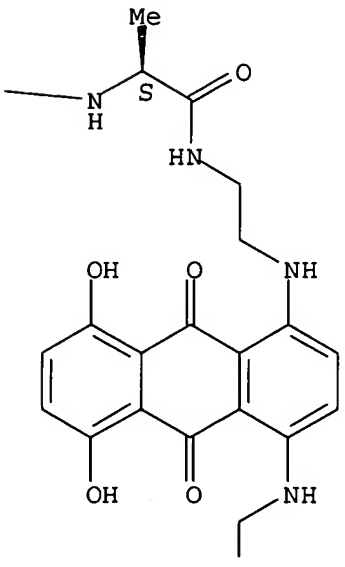
RN 114742-31-3 CAPLUS
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]glycyl-L-prolylglycylglycyl-L-prolyl-N-[2-[[9,10-dihydro-5,8-dihydroxy-9,10-dioxo-4-[[2-[[N-[1-[N-[N-[1-[N-[(phenylmethoxy)carbonyl]glycyl]-L-prolyl]glycyl]glycyl]-L-prolyl]-L-alanyl]amino]ethyl]amino]-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

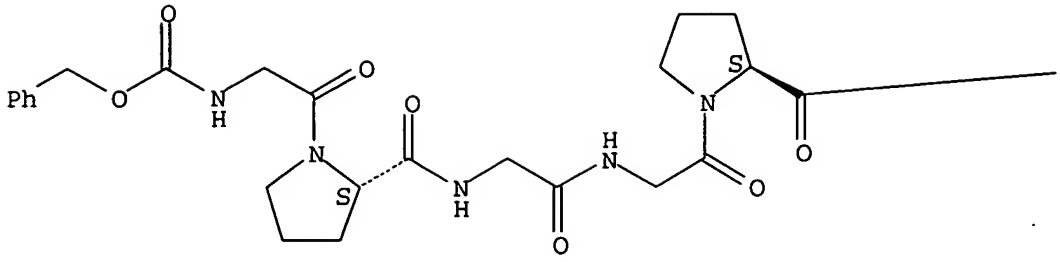
PAGE 1-A



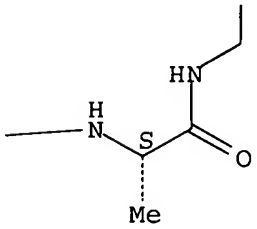
PAGE 1-B



PAGE 2-A



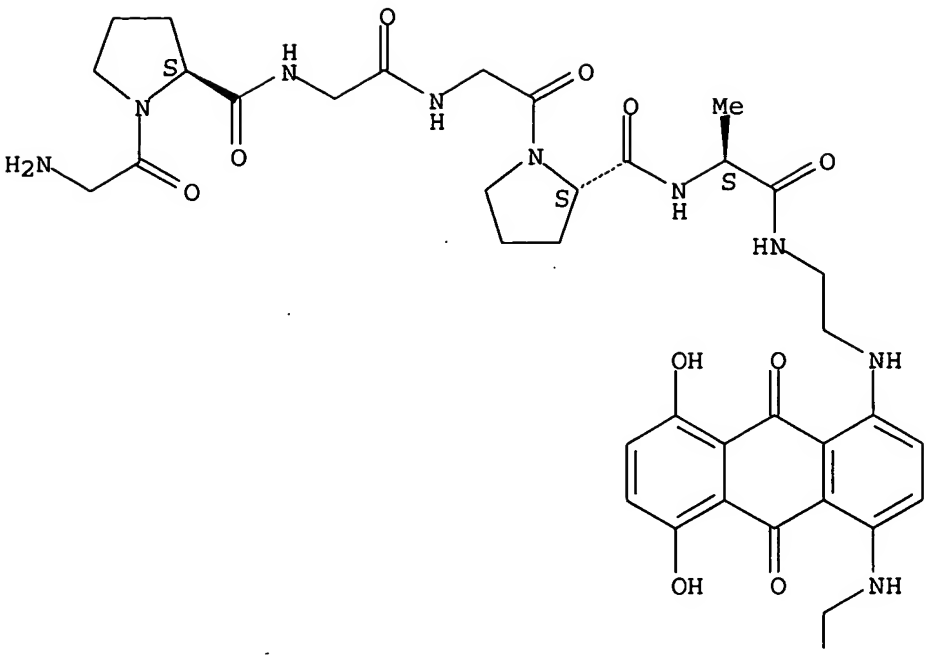
PAGE 2-B



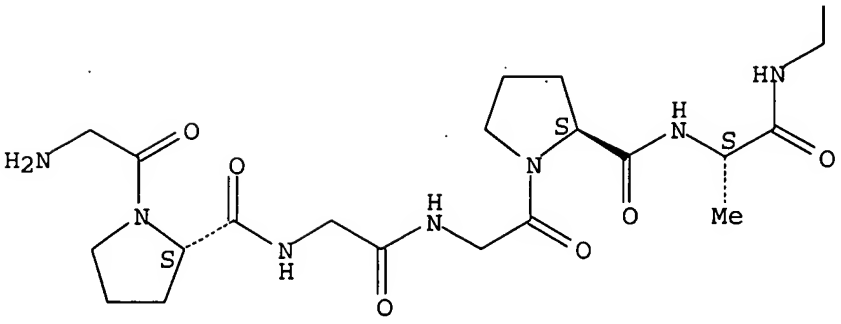
RN 114742-32-4 CAPLUS
CN L-Alaninamide, glycyl-L-prolylglycylglycyl-L-prolyl-N-[2-[[4-[[2-[[N-[1-[N-[N-(1-glycyl-L-prolyl)glycyl]glycyl]-L-prolyl]-L-alanyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]-, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



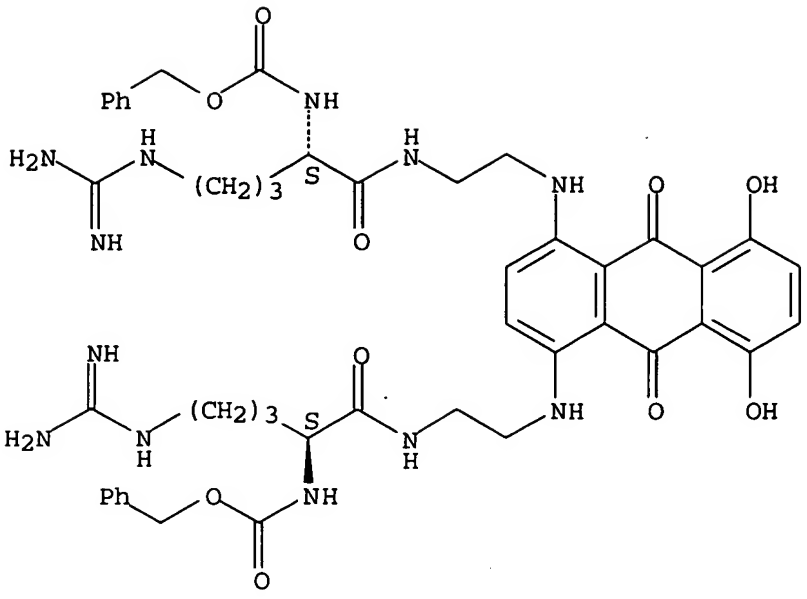
● 2 HBr

RN 114742-50-6 CAPLUS

CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[1-[3-[(aminoiminomethyl)amino]propyl]-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, dihydrobromide, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

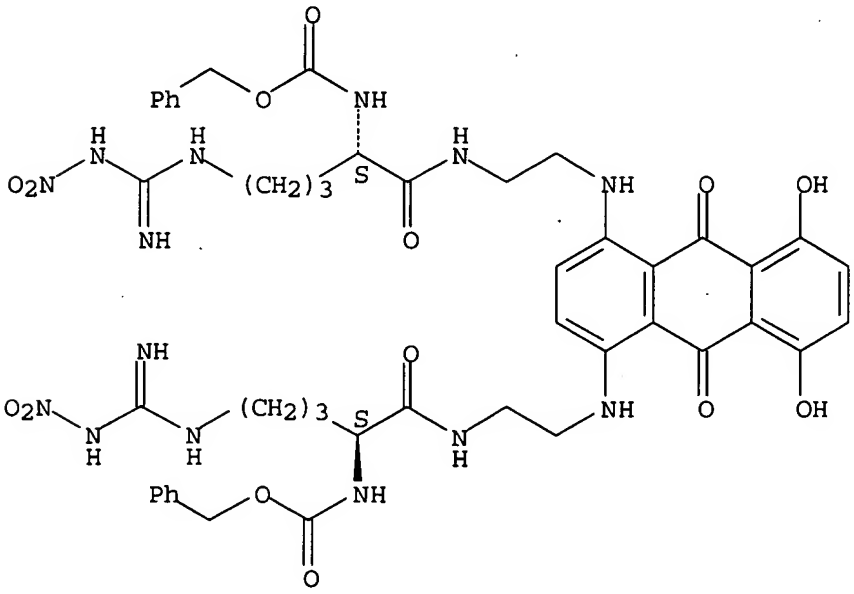


PAGE 2-A

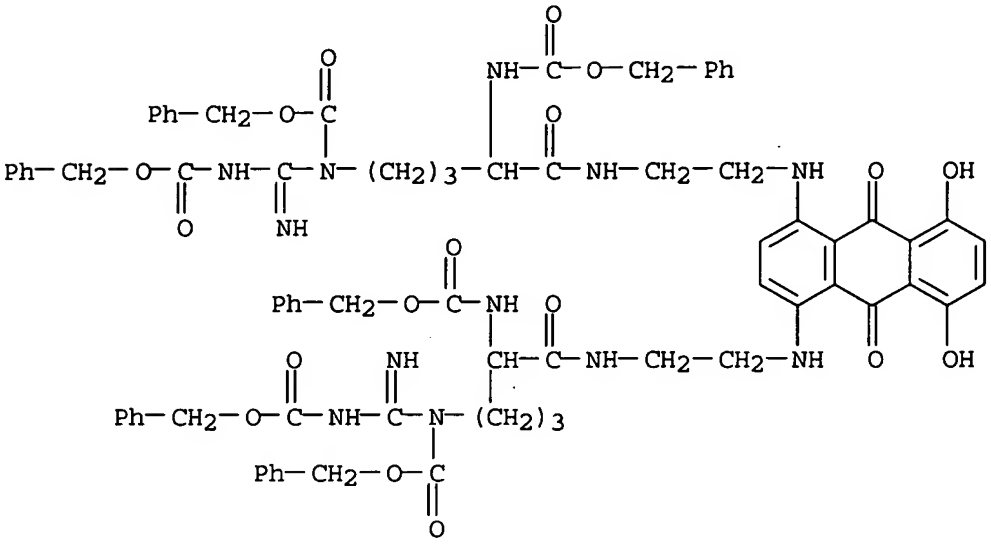
● 2 HBr

RN 114742-55-1 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediylimino[1-[3-[[imino(nitroamino)methyl]amino]propyl]-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



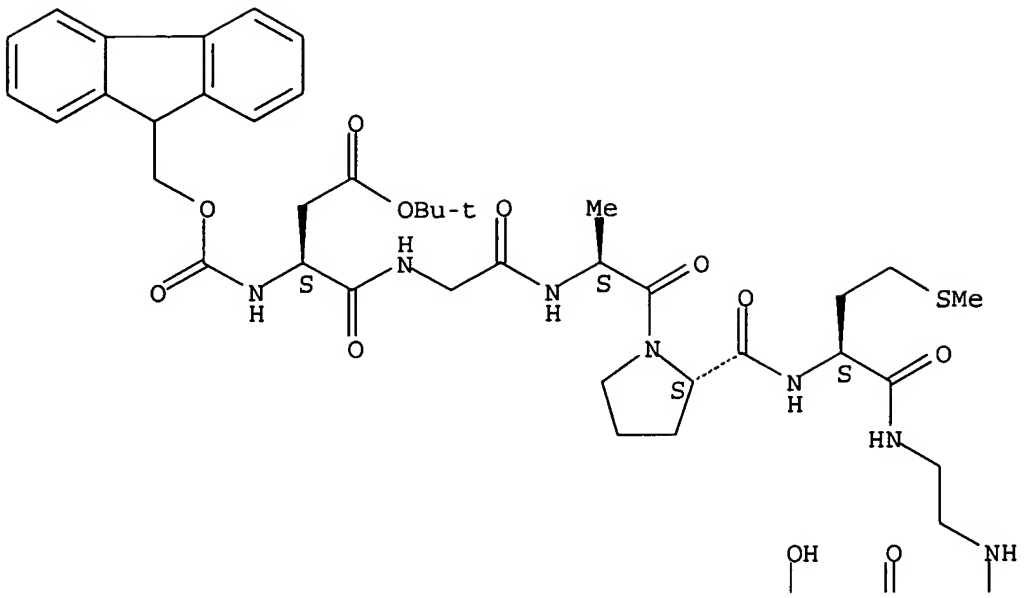
RN 114742-59-5 CAPLUS
CN 2-Oxa-4,6,11-triazadodecan-12-oic acid, 10,10'-[(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis(imino-2,1-ethanediyliminocarbonyl)]bis[5-imino-3-oxo-1-phenyl-6-[(phenylmethoxy)carbonyl]-, bis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)



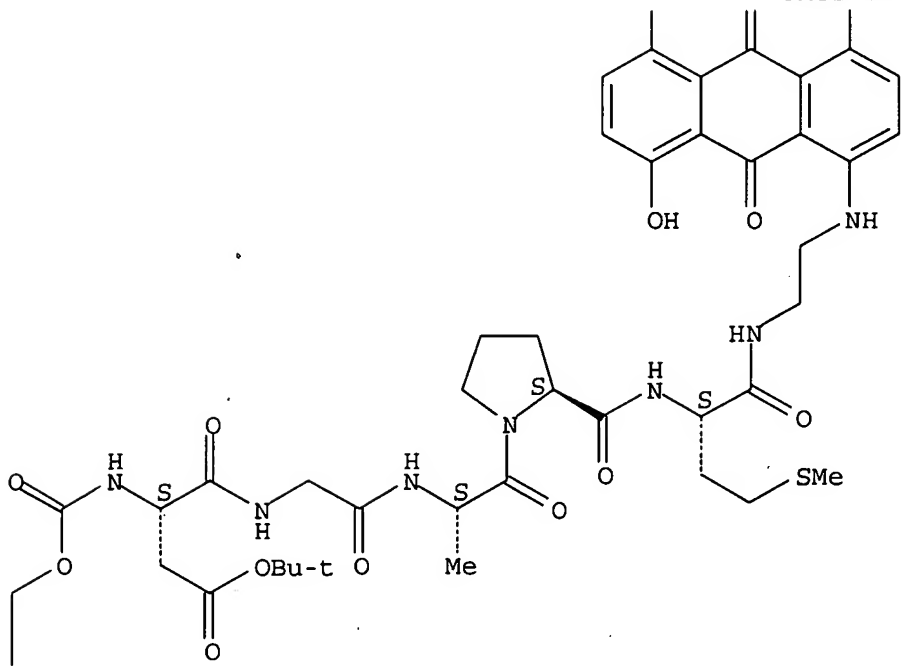
RN 114742-63-1 CAPLUS
CN L-Methioninamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-α-aspartylglycyl-L-alanyl-L-prolyl-N-[2-[[4-[[2-[[N-[1-[N-[N-[N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-α-aspartyl]glycyl]-L-alanyl]-L-prolyl]-L-methionyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

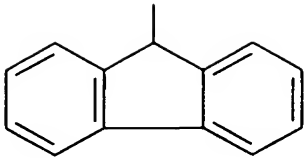
PAGE 1-A



PAGE 2-A



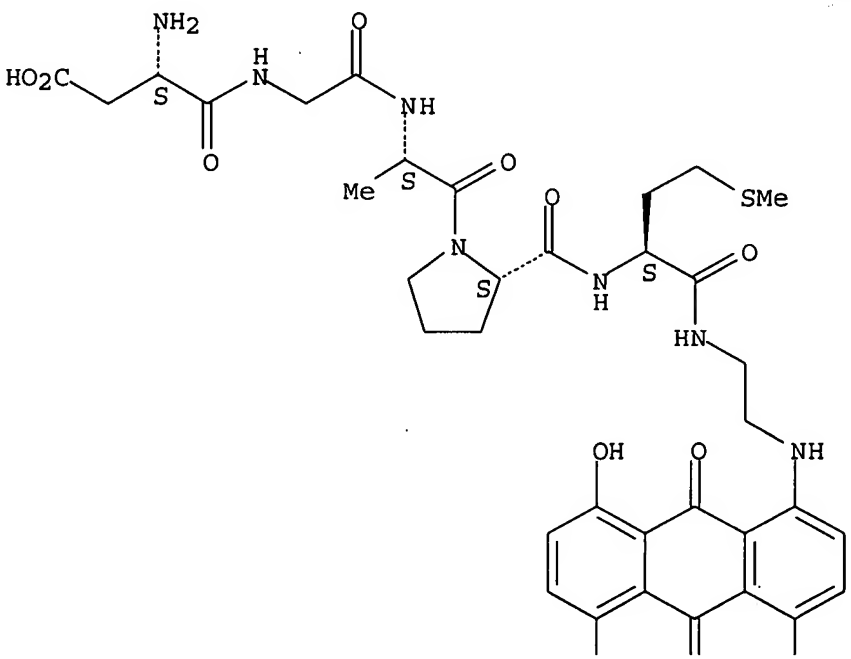
PAGE 3-A

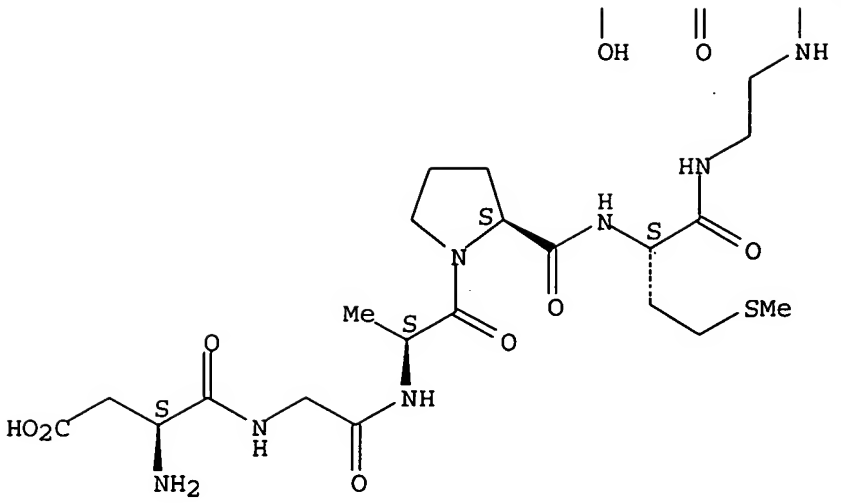


RN 114742-64-2 CAPLUS
CN L-Methioninamide, L-α-aspartylglycyl-L-alanyl-L-prolyl-N-[2-[[4-[[2-[[N-[1-[N-(N-L-α-aspartylglycyl)-L-alanyl]-L-prolyl]-L-methionyl]amino]ethyl]amino]-9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1-anthracenyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

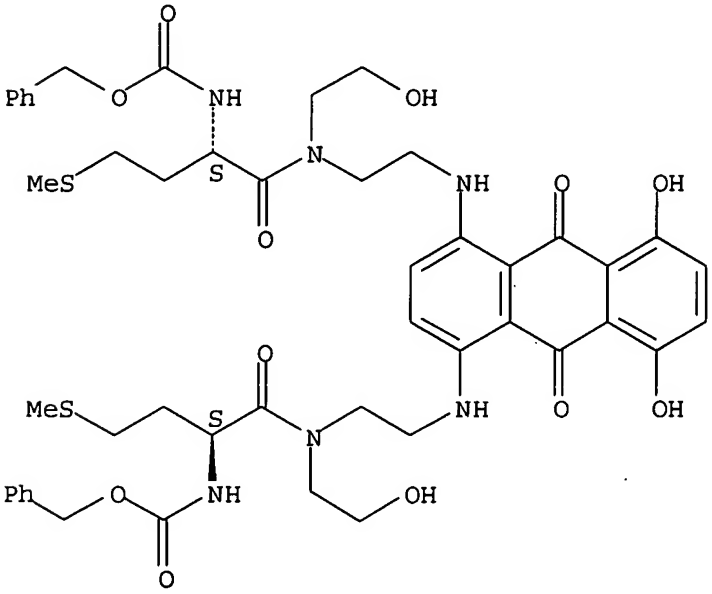
PAGE 1-A





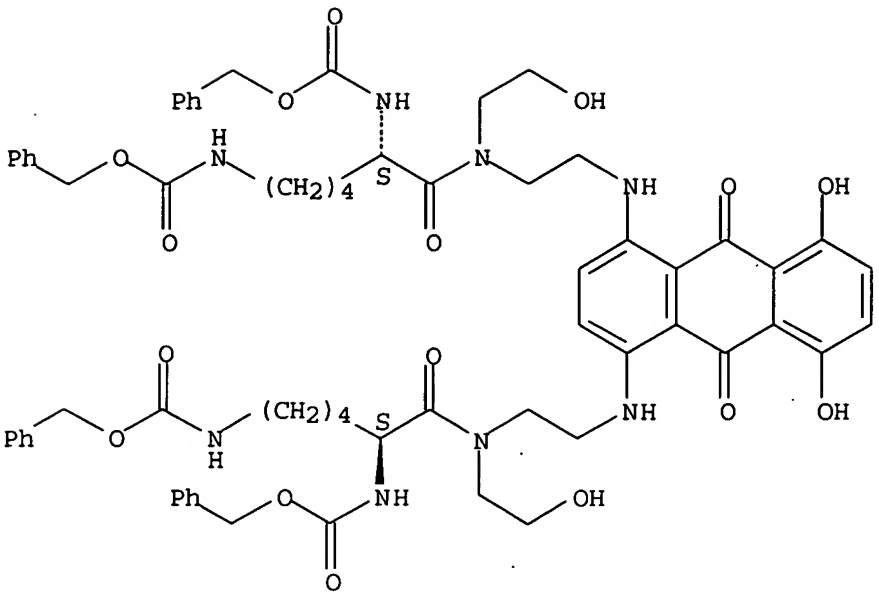
RN 114742-65-3 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediyl[(2-hydroxyethyl)imino][1-[2-(methylthio)ethyl]-2-oxo-2,1-ethanediyl]]]bis-, bis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



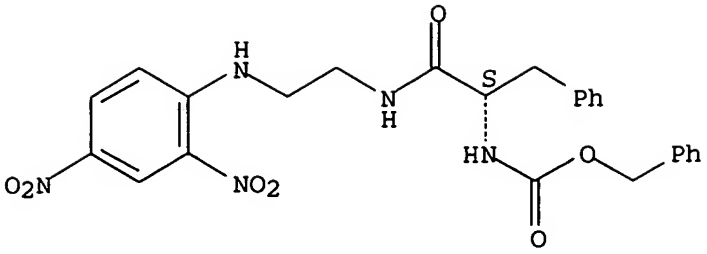
RN 114765-60-5 CAPLUS
CN Carbamic acid, [(9,10-dihydro-5,8-dihydroxy-9,10-dioxo-1,4-anthracenediyl)bis[imino-2,1-ethanediyl[(2-hydroxyethyl)imino](1-oxo-1,2,6-hexanetriyl)]]tetrakis-, tetrakis(phenylmethyl) ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 79 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1987:29212 CAPLUS
DN 106:29212
TI Intramolecularly quenched fluorescent substrates for aspartic proteinases
AU Filippova, I. Yu.; Lysogorskaya, E. N.; Oksenoit, E. S.; Komarov, Yu. E.; Stepanov, V. M.
CS Chem. Dep., M. V. Lomonosov Moscow State Univ., Moscow, USSR
SO Bioorganicheskaya Khimiya (1986), 12(9), 1172-80
CODEN: BIKHD7; ISSN: 0132-3423
DT Journal
LA Russian
AB o-Aminobenzoyl tetrapeptides of the structure, Abz-Ala-Ala-Phe-Phe-B [where Abz is o-aminobenzoyl and B is p-nitroaniline (pNA), 2,4-dinitrophenylethylenediamine (Ded), or p-nitrobenzylamine (Nba)], were prepared by a combination of chemical and enzymic methods. The design of these peptides relied on the principle of intramol. fluorescence quenching. Pepsin and aspergillopepsin A hydrolyzed the Phe-Phe bond of the substrates, Abz-Ala-Ala-Phe-Phe-Ded, Abz-Ala-Ala-Phe-Phe-pNa, Abz-Ala-Ala-Phe-Phe-Nba, with an increase in fluorescence of 8.5-, 4.5-, and 2.5-fold, resp., upon hydrolysis. Kinetic parameters for the enzymic hydrolysis of the substrates were determined The proteolysis coeffs. for the synthetic substrates were comparable to the kcat/Km values (where kcat is the catalytic rate constant) for the best substrates of aspartic proteases previously reported.
IT **106077-03-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)
RN 106077-03-6 CAPLUS
CN Carbamic acid, [2-[[2-[(2,4-dinitrophenyl)amino]ethyl]amino]-2-oxo-1-(phenylmethyl)ethyl]-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

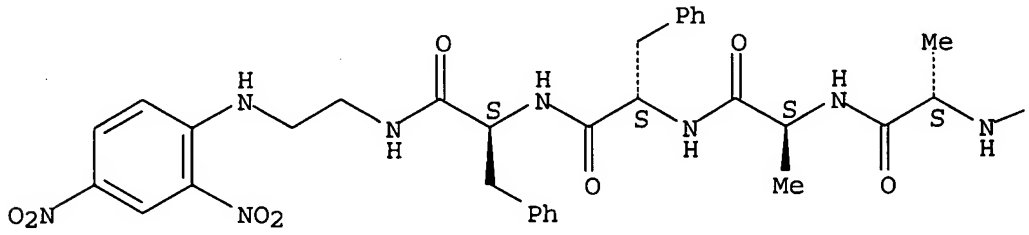
Absolute stereochemistry.



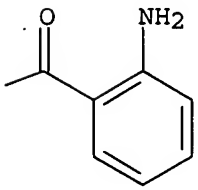
IT **106076-97-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and reaction kinetics with aspartic proteinases)
RN 106076-97-5 CAPLUS
CN L-Phenylalaninamide, N-(2-aminobenzoyl)-L-alanyl-L-alanyl-L-phenylalanyl-N-[2-[(2,4-dinitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L4 ANSWER 80 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1984:417739 CAPLUS
DN 101:17739
TI A photoaffinity reagent to label the opiate receptors of guinea pig ileum and mouse vas deferens
AU Fujioka, Toshiyuki; Matsunaga, Tohru; Nakayama, Hitoshi; Kanaoka, Yuichi; Hayashi, Yujiro; Kangawa, Kenji; Matsuo, Hisayuki
CS Fac. Pharm. Sci., Hokkaido Univ., Sapporo, 060, Japan
SO Journal of Medicinal Chemistry (1984), 27(7), 836-40
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
AB An enkephalin derivative, [D-Ala2,Leu5]-enkephalin N-[(2-nitro-4-azidophenyl)amino]ethylamide (I) [**83544-71-2**] was synthesized as a photoaffinity label for the opiate receptor. This compound retained the full biol. activity of [D-Ala2,Leu5]-enkephalin [64963-01-5] in

guinea pig ileum and mouse vas deferens tests with concentration values for 50% inhibition (IC50) of 4.4 and 2.6 nM, resp., and inhibited the binding of [3H]naloxone to rat brain membrane preparation with an IC50 value of 2.5 nM. Photolysis of a muscle strip of the guinea pig ileum or of the mouse vas deferens in the presence of I caused irreversible inhibition of elec. stimulated contractions with high efficiencies (80 and 66%, resp.), whereas the inhibitory effect in the dark was fully reversed by washing. This irreversible inhibition during photolysis was completely prevented by the presence of [D-Ala2,Leu5]-enkephalin. Thus, I is a prominent candidate as a photoaffinity label for the opiate receptor.

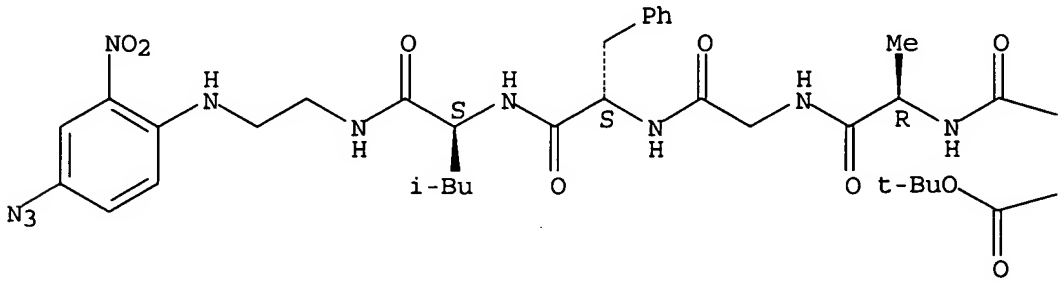
IT **90171-87-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking of)

RN 90171-87-2 CAPLUS

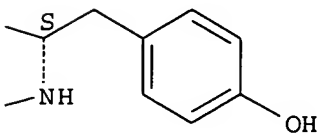
CN L-Leucinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-tyrosyl-D-alanylglycyl-L-phenylalanyl-N-[2-[(4-azido-2-nitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



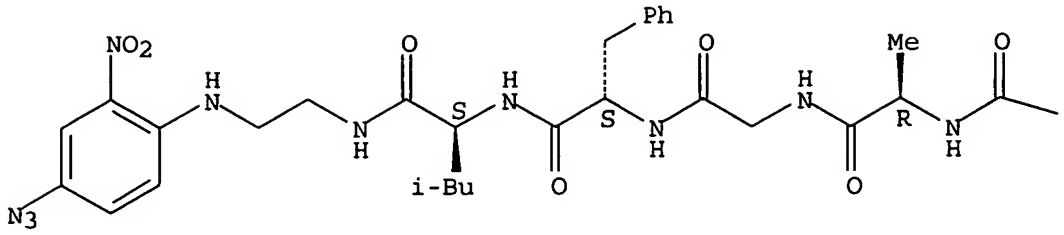
IT **83544-71-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and opiate receptor photoaffinity labeling with)

RN 83544-71-2 CAPLUS

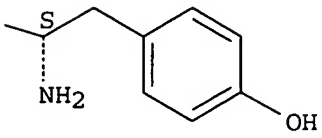
CN L-Leucinamide, L-tyrosyl-D-alanylglycyl-L-phenylalanyl-N-[2-[(4-azido-2-nitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



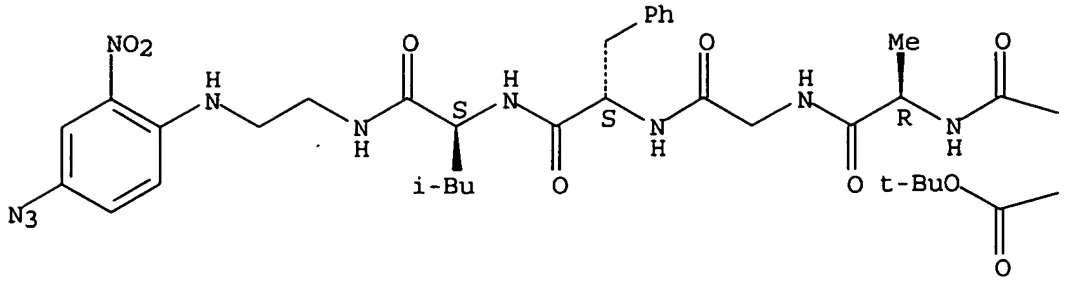
PAGE 1-B



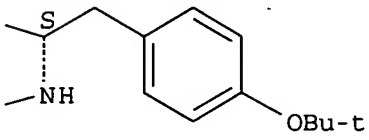
L4 ANSWER 81 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1983:606569 CAPLUS
DN 99:206569
TI Photolabile opioid derivatives of D-Ala2-Leu5-enkephalin and their interactions with the opiate receptor
AU Zioudrou, Christine; Varoucha, Dido; Loukas, Sypros; Nicolaou, Nicolaos; Streaty, Richard A.; Klee, Werner A.
CS Dep. Biol., Nucl. Res. Cent. "Demokritos", Athens, Greece
SO Journal of Biological Chemistry (1983), 258(18), 10934-7
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
AB Photolabile derivs. of D-Ala2,Leu5-enkephalin were prepared by synthetic procedures in which a 2-nitro-4-azidophenyl group is linked to the terminal carboxyl group of the enkephalin by means of an ethylenediamine or ethylenediamine β-alanine spacer. These peptides bind to opiate receptors with nanomolar affinities and inhibit elec. stimulated contractions of the mouse vas deferens and adenylate cyclase [9012-42-4] activity of NG108-15 neuroblastoma + glioma hybrid cell membranes. Both inhibitions are reversed by the opiate antagonist naloxone. Photolysis of the ligands bound to rat brain membranes results in the loss of .apprx.50% of the receptor sites. This decrease in receptor number is blocked by naloxone and requires light. A photolabile 3H-labeled enkephalin derivative labels an equivalent number of sites under similar irradiation conditions.
IT **87918-83-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deprotection of)
RN 87918-83-0 CAPLUS
CN L-Leucinamide, N-[(1,1-dimethylethoxy)carbonyl]-O-(1,1-dimethylethyl)-L-tyrosyl-D-alanylglycyl-L-phenylalanyl-N-[2-[(4-azido-2-nitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



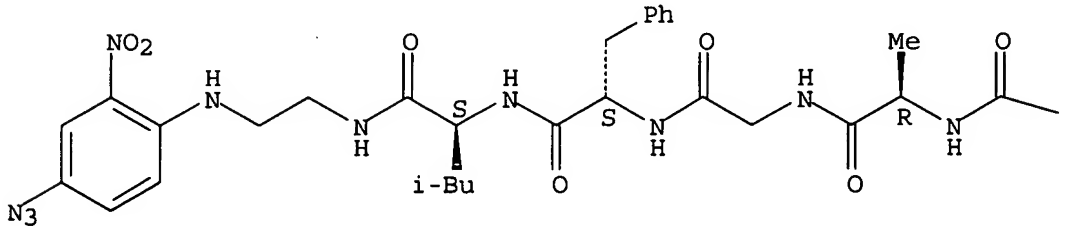
PAGE 1-B



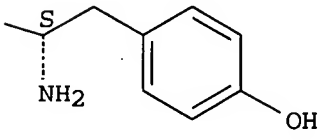
IT **83544-71-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and opiate receptor binding of)
RN 83544-71-2 CAPLUS
CN L-Leucinamide, L-tyrosyl-D-alanylglycyl-L-phenylalanyl-N-[2-[(4-azido-2-nitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

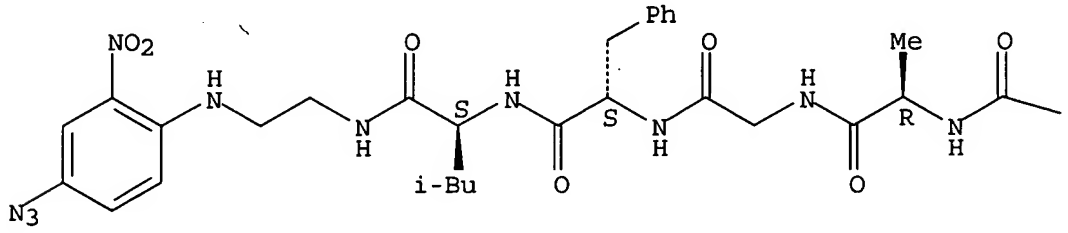


L4 ANSWER 82 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1982:593235 CAPLUS
DN 97:193235
TI Photolabile ligands for opiate receptors
AU Zioudrou, C.; Varoucha, D.; Loukas, S.; Streaty, R. A.; Klee, W. A.
CS Nucl. Res. Cent. "Demokritos", Attiki, Greece
SO Life Sciences (1982), 31(16-17), 1671-4
CODEN: LIFSAK; ISSN: 0024-3205
DT Journal
LA English
AB The 2-nitro-4-azidophenyl(NAP)-D-Ala2-Leu5-enkephalin derivs. Try-D-Ala-Gly-Phe-Leu-CONCH2CH2NH-NAP [**83544-71-2**] and Try-D-Ala-Gly-Phe-Leu-CONCH2CH2NH-COCH2CH2NHAP (E-NAP-β-Ala-EDA) [83544-72-3] were synthesized by conventional peptide methods. Their structures were determined by amino acid anal., UV, visible and IR spectroscopy. Both peptides were bound with a high affinity to the opiate receptors of rat brain membranes and inhibited strongly the contractions of elec.-stimulated vas deferens and the adenyl cyclase of the NG 108-15 cell membranes. These effects were reversed by the antagonist naloxone. Photolysis of the rat brain membranes-(E-NAP-β-Ala-EDA) complex caused a 20-30% inactivation of the opiate receptors. Inactivation was prevented when the complex was irradiated in the presence of naloxone. The radiolabeled derivs. of these enkephalin analogs may prove useful photochem. labels of the opiate receptor.
IT **83544-71-2**
RL: BIOL (Biological study)
(as opiate receptor photolabile ligand)
RN 83544-71-2 CAPLUS
CN L-Leucinamide, L-tyrosyl-D-alanylglycyl-L-phenylalanyl-N-[2-[(4-azido-2-nitrophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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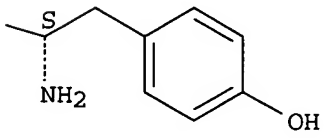


L4 ANSWER 83 OF 83 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1980:426815 CAPLUS
DN 93:26815
TI Enkephalin analogs with strong analgesic and psychotropic activity

IN Lecomte, Jeanne Marie; Roques, Bernard; Schwartz, Jean Charles
PA Laboratoire Le Brun S. A., Fr.
SO Eur. Pat. Appl., 42 pp.
CODEN: EPXXDW
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 5658	A1	19791128	EP 1979-400268	19790425
R: BE, CH, DE, GB, IT, LU, NL, SE				
			FR 1978-12543	19780427
FR 2424253	A1	19791123	FR 1978-12543	19780427
FR 2424253	B1	19810102		

A

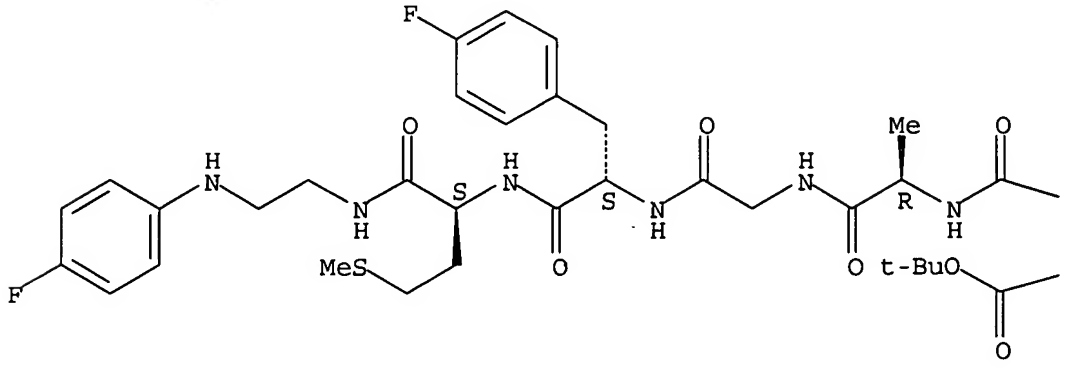
AB Enkephalin analogs H-Tyr-D-Ala-Gly-X-X1-NHCnH2nR [I; X = Phe, p-fluorophenylalanine residue; X1 : Met, Leu, Pro, monofluoro Leu or Pro; R = halo, mono- or polysubstituted C1-4 alkyl, NHR1, NHSO2R1, COR1, NHCO(CH2)m R1 [R1 = halo, mono- or polysubstituted C1-4 alkyl, (un)substituted Ph, (un)substituted CHPh2, (un)substituted α- or β-naphthyl, heterocyclic residue (e.g., thiophene, quinoline); m = 0-4]; n = 0-6], having the title activities, were prepared Thus, BOC-Tyr-D-Ala-Gly-Phe-Met-OH (BOC = Me3CO2C) was amidated with amine II to give the BOC pentapeptide amide, which was BOC-deblocked by HCl-dioxane to give enkephalin amide III.HCl (m =2) (IV). Twenty-nine other I analogs were prepared Data are given for the title pharmaceutical activities of IV and III.HCl (m = 5).

IT **73966-13-9P 73966-16-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and deblocking of)

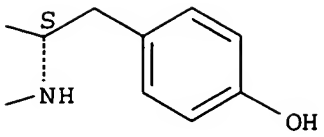
RN 73966-13-9 CAPLUS
CN L-Methioninamide, N-[(1,1-dimethylethoxy)carbonyl]-L-tyrosyl-D-alanylglycyl-4-fluoro-L-phenylalanyl-N-[2-[(4-fluorophenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



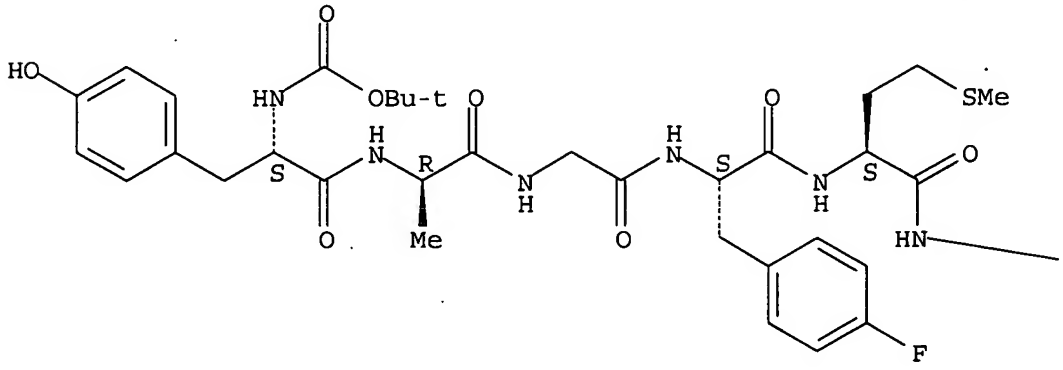
PAGE 1-B



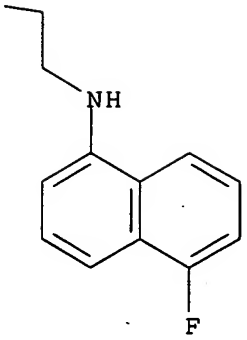
RN 73966-16-2 CAPLUS
CN L-Methioninamide, N-[(1,1-dimethylethoxy)carbonyl]-L-tyrosyl-D-alanylglycyl-4-fluoro-L-phenylalanyl-N-[2-[(5-fluoro-1-naphthalenyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



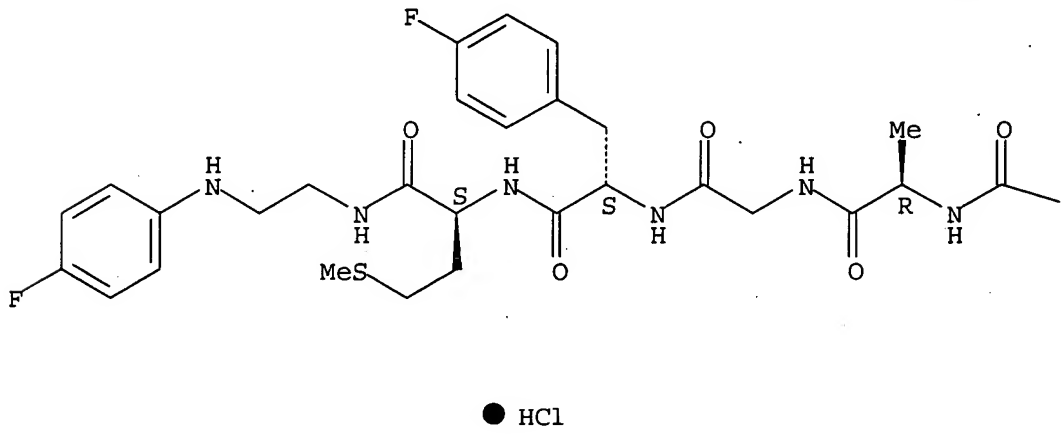
PAGE 1-B



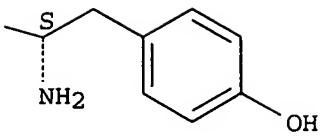
IT **73966-19-5P 73966-23-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 73966-19-5 CAPLUS
CN L-Methioninamide, L-tyrosyl-D-alanylglycyl-4-fluoro-L-phenylalanyl-N-[2-[(4-fluorophenyl)amino]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



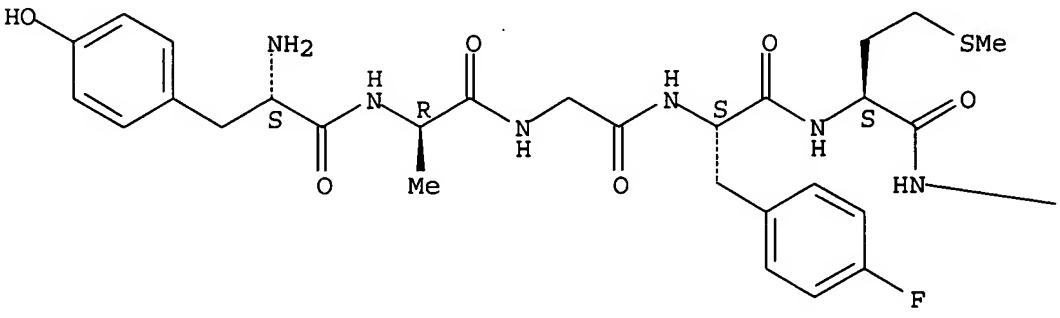
PAGE 1-B



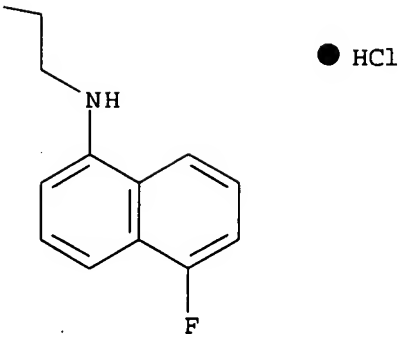
RN 73966-23-1 CAPLUS
CN L-Methioninamide, L-tyrosyl-D-alanylglycyl-4-fluoro-L-phenylalanyl-N-[2-[(5-fluoro-1-naphthalenyl)amino]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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L5 STRUCTURE UPLOADED

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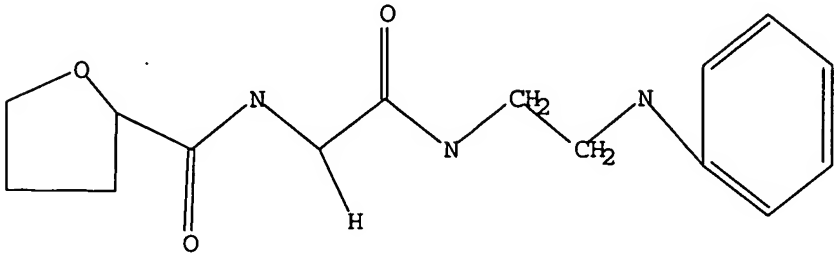
L5 HAS NO ANSWERS
L5 STR



G1 C,O,N

Structure attributes must be viewed using STN Express query preparation.

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Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 19:51:19 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 45 TO ITERATE

100.0% PROCESSED 45 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 498 TO 1302
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

L7 0 L6

=> search l5
REGlstRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

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SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          498 TO     1302
PROJECTED ANSWERS:               0 TO        0

L8             0 SEA SSS SAM L5


L9             0 L8

=>
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